

# Wyrównanie sieci niwelacyjnej metodą pośredniczącą wraz z oceną dokładności

Mając dane wysokości trzech reperów w tabeli poniżej

| nazwa | $H$ [m]  |
|-------|----------|
| 101   | 221,6500 |
| 102   | 210,0820 |
| 103   | 214,9079 |

oraz wartości pomierzonych przewyższeń pomiędzy punktami sieci niwelacyjnej (patrz indywidualne dane na następnych stronach),

należy obliczyć metodą pośredniczącą:

- poprawki do przewyższeń oraz ich błędy średnie,
- korelacje pomiędzy wyrównanymi wysokościami  $H_3^w$  i  $H_5^w$
- błąd średni funkcji  
$$u = H_1^w + H_2^w + 2H_3^w - H_6^w,$$

## Zestaw 1

|   |     | $h$ [m] | $m$ [mm] |
|---|-----|---------|----------|
| 4 | 102 | -9,685  | 7        |
| 2 | 7   | -6,111  | 3        |
| 1 | 5   | 8,540   | 7        |
| 3 | 7   | 0,755   | 5        |
| 1 | 6   | 15,699  | 7        |
| 2 | 101 | -2,791  | 5        |
| 4 | 5   | -3,709  | 7        |
| 3 | 6   | 5,655   | 3        |
| 1 | 3   | 10,047  | 3        |
| 5 | 7   | 2,260   | 5        |
| 6 | 103 | -8,326  | 4        |
| 2 | 3   | -6,867  | 3        |
| 5 | 6   | 7,156   | 4        |
| 4 | 6   | 3,454   | 8        |

## Zestaw 2

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 5       | 6       | 7,162    | 3 |
| 4       | 7       | -1,433   | 4 |
| 2       | 3       | -6,872   | 7 |
| 6       | 103     | -8,324   | 4 |
| 1       | 6       | 15,703   | 3 |
| 1       | 7       | 10,805   | 4 |
| 5       | 7       | 2,262    | 3 |
| 1       | 101     | 14,127   | 8 |
| 4       | 102     | -9,690   | 7 |
| 2       | 5       | -8,376   | 6 |
| 1       | 3       | 10,055   | 7 |
| 4       | 5       | -3,701   | 8 |
| 4       | 6       | 3,460    | 3 |
| 3       | 6       | 5,646    | 4 |

## Zestaw 3

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 4       | 102 | -9,684  | 7        |
| 3       | 7   | 0,756   | 6        |
| 2       | 5   | -8,380  | 6        |
| 1       | 2   | 16,921  | 7        |
| 1       | 5   | 8,545   | 4        |
| 4       | 7   | -1,434  | 4        |
| 7       | 101 | 3,322   | 8        |
| 3       | 6   | 5,651   | 6        |
| 4       | 6   | 3,455   | 3        |
| 3       | 4   | 2,198   | 5        |
| 5       | 7   | 2,268   | 7        |
| 1       | 6   | 15,701  | 3        |
| 1       | 4   | 12,242  | 3        |
| 6       | 103 | -8,321  | 3        |

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## Zestaw 4

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 3       | 6   | 5,656   | 6        |
| 1       | 7   | 10,812  | 3        |
| 1       | 5   | 8,539   | 6        |
| 5       | 7   | 2,265   | 4        |
| 4       | 5   | -3,702  | 4        |
| 5       | 6   | 7,162   | 6        |
| 4       | 102 | -9,692  | 6        |
| 3       | 4   | 2,198   | 7        |
| 2       | 4   | -4,676  | 3        |
| 2       | 6   | -1,218  | 5        |
| 1       | 2   | 16,917  | 7        |
| 6       | 103 | -8,326  | 6        |
| 1       | 3   | 10,052  | 3        |
| 2       | 101 | -2,791  | 6        |

## Zestaw 5

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 3   | 10,053  | 3        |
| 5       | 103 | -1,161  | 4        |
| 2       | 3   | -6,871  | 6        |
| 2       | 101 | -2,797  | 7        |
| 1       | 5   | 8,547   | 3        |
| 2       | 7   | -6,110  | 5        |
| 5       | 6   | 7,159   | 5        |
| 3       | 4   | 2,198   | 6        |
| 6       | 102 | -13,144 | 4        |
| 3       | 5   | -1,504  | 7        |
| 2       | 6   | -1,217  | 3        |
| 2       | 4   | -4,675  | 3        |
| 1       | 6   | 15,699  | 3        |
| 4       | 7   | -1,434  | 4        |

## Zestaw 6

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 4       | 102 | -9,692  | 5        |
| 1       | 6   | 15,700  | 8        |
| 4       | 7   | -1,436  | 7        |
| 2       | 5   | -8,381  | 5        |
| 3       | 4   | 2,196   | 3        |
| 3       | 5   | -1,508  | 7        |
| 4       | 6   | 3,461   | 3        |
| 5       | 101 | 5,584   | 5        |
| 1       | 3   | 10,048  | 7        |
| 2       | 6   | -1,225  | 7        |
| 2       | 7   | -6,110  | 3        |
| 1       | 103 | 7,387   | 7        |
| 5       | 7   | 2,270   | 4        |
| 3       | 7   | 0,752   | 3        |

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## Zestaw 7

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 4       | 7   | -1,443  | 4        |
| 2       | 4   | -4,683  | 6        |
| 6       | 102 | -13,152 | 7        |
| 3       | 103 | -2,667  | 4        |
| 4       | 6   | 3,457   | 3        |
| 4       | 5   | -3,706  | 3        |
| 2       | 3   | -6,872  | 3        |
| 5       | 6   | 7,163   | 4        |
| 5       | 7   | 2,268   | 3        |
| 2       | 6   | -1,221  | 4        |
| 1       | 7   | 10,806  | 6        |
| 7       | 101 | 3,328   | 5        |
| 2       | 7   | -6,119  | 6        |
| 1       | 3   | 10,056  | 7        |

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## Zestaw 8

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 7   | 10,812  | 5        |
| 3       | 7   | 0,761   | 6        |
| 3       | 6   | 5,652   | 7        |
| 4       | 7   | -1,439  | 7        |
| 5       | 102 | -5,986  | 6        |
| 2       | 7   | -6,117  | 3        |
| 1       | 6   | 15,707  | 6        |
| 2       | 3   | -6,868  | 4        |
| 2       | 5   | -8,382  | 3        |
| 6       | 103 | -8,319  | 3        |
| 3       | 4   | 2,198   | 4        |
| 5       | 6   | 7,165   | 4        |
| 1       | 101 | 14,128  | 7        |
| 1       | 4   | 12,240  | 4        |

## Zestaw 9

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 5       | 7   | 2,269   | 6        |
| 3       | 5   | -1,511  | 6        |
| 3       | 7   | 0,758   | 5        |
| 3       | 101 | 4,074   | 7        |
| 2       | 3   | -6,872  | 6        |
| 2       | 6   | -1,215  | 5        |
| 2       | 4   | -4,680  | 8        |
| 1       | 102 | 2,555   | 8        |
| 4       | 7   | -1,438  | 5        |
| 4       | 5   | -3,700  | 4        |
| 1       | 7   | 10,812  | 6        |
| 5       | 6   | 7,164   | 6        |
| 4       | 103 | -4,865  | 7        |
| 1       | 6   | 15,701  | 6        |

## Zestaw 10

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 2       | 4       | -4,673   | 5 |
| 5       | 6       | 7,162    | 6 |
| 2       | 7       | -6,119   | 7 |
| 2       | 5       | -8,382   | 6 |
| 5       | 7       | 2,259    | 4 |
| 1       | 6       | 15,708   | 5 |
| 4       | 6       | 3,463    | 4 |
| 1       | 7       | 10,804   | 8 |
| 4       | 7       | -1,438   | 5 |
| 1       | 3       | 10,047   | 5 |
| 2       | 3       | -6,873   | 7 |
| 3       | 103     | -2,672   | 3 |
| 7       | 102     | -8,247   | 5 |
| 5       | 101     | 5,590    | 3 |

## Zestaw 11

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 3       | 4   | 2,195   | 7        |
| 3       | 101 | 4,077   | 8        |
| 1       | 2   | 16,921  | 6        |
| 2       | 103 | -9,543  | 3        |
| 4       | 6   | 3,456   | 8        |
| 5       | 7   | 2,270   | 3        |
| 5       | 6   | 7,165   | 8        |
| 3       | 6   | 5,654   | 5        |
| 1       | 3   | 10,054  | 8        |
| 2       | 4   | -4,673  | 5        |
| 1       | 7   | 10,804  | 5        |
| 3       | 7   | 0,759   | 3        |
| 5       | 102 | -5,986  | 8        |
| 1       | 5   | 8,544   | 6        |

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## Zestaw 12

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 1       | 6       | 15,702   | 7 |
| 5       | 7       | 2,269    | 5 |
| 1       | 4       | 12,251   | 5 |
| 3       | 4       | 2,195    | 7 |
| 2       | 3       | -6,874   | 8 |
| 5       | 6       | 7,164    | 6 |
| 3       | 7       | 0,757    | 5 |
| 4       | 102     | -9,691   | 6 |
| 2       | 4       | -4,680   | 6 |
| 4       | 5       | -3,707   | 4 |
| 2       | 6       | -1,221   | 3 |
| 2       | 101     | -2,791   | 3 |
| 1       | 3       | 10,053   | 6 |
| 3       | 103     | -2,667   | 8 |

## Zestaw 13

| <hr/>   |     |         |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 5       | 7   | 2,270   | 4        |
| 2       | 4   | -4,674  | 8        |
| 3       | 5   | -1,505  | 5        |
| 2       | 5   | -8,379  | 5        |
| 1       | 103 | 7,389   | 3        |
| 6       | 101 | -1,577  | 4        |
| 1       | 2   | 16,922  | 4        |
| 4       | 7   | -1,439  | 8        |
| 1       | 4   | 12,243  | 3        |
| 5       | 6   | 7,165   | 3        |
| 3       | 7   | 0,755   | 3        |
| 2       | 6   | -1,217  | 5        |
| 3       | 4   | 2,188   | 8        |
| 2       | 102 | -14,365 | 7        |
| <hr/>   |     |         |          |

## Zestaw 14

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 6   | 15,699  | 7        |
| 2       | 101 | -2,791  | 5        |
| 3       | 7   | 0,755   | 5        |
| 2       | 3   | -6,867  | 3        |
| 4       | 5   | -3,709  | 7        |
| 3       | 6   | 5,655   | 3        |
| 1       | 3   | 10,047  | 3        |
| 5       | 6   | 7,156   | 4        |
| 1       | 5   | 8,540   | 7        |
| 2       | 7   | -6,111  | 3        |
| 6       | 103 | -8,326  | 4        |
| 5       | 7   | 2,260   | 5        |
| 4       | 102 | -9,685  | 7        |
| 4       | 6   | 3,454   | 8        |

## Zestaw 15

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 7   | 10,812  | 3        |
| 1       | 5   | 8,538   | 3        |
| 3       | 7   | 0,753   | 8        |
| 5       | 6   | 7,159   | 6        |
| 4       | 6   | 3,455   | 7        |
| 2       | 7   | -6,110  | 3        |
| 1       | 101 | 14,136  | 4        |
| 5       | 7   | 2,267   | 7        |
| 7       | 102 | -8,247  | 6        |
| 3       | 6   | 5,651   | 5        |
| 2       | 3   | -6,875  | 8        |
| 3       | 4   | 2,192   | 4        |
| 6       | 103 | -8,318  | 6        |
| 1       | 6   | 15,706  | 5        |



## Zestaw 16

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 6   | 15,706  | 5        |
| 1       | 5   | 8,538   | 3        |
| 1       | 7   | 10,812  | 3        |
| 2       | 3   | -6,875  | 8        |
| 5       | 6   | 7,159   | 6        |
| 1       | 101 | 14,136  | 4        |
| 7       | 102 | -8,247  | 6        |
| 3       | 6   | 5,651   | 5        |
| 3       | 4   | 2,192   | 4        |
| 4       | 6   | 3,455   | 7        |
| 5       | 7   | 2,267   | 7        |
| 3       | 7   | 0,753   | 8        |
| 2       | 7   | -6,110  | 3        |
| 6       | 103 | -8,318  | 6        |

## Zestaw 17

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 5       | 6       | 7,162    | 5 |
| 2       | 4       | -4,682   | 7 |
| 4       | 103     | -4,857   | 3 |
| 3       | 6       | 5,648    | 4 |
| 3       | 5       | -1,509   | 3 |
| 1       | 2       | 16,917   | 8 |
| 2       | 101     | -2,798   | 5 |
| 5       | 102     | -5,986   | 5 |
| 1       | 6       | 15,698   | 7 |
| 4       | 5       | -3,702   | 6 |
| 3       | 7       | 0,760    | 4 |
| 1       | 4       | 12,246   | 6 |
| 2       | 6       | -1,218   | 7 |
| 1       | 7       | 10,806   | 7 |

## Zestaw 18

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 5       | 7   | 2,269   | 6        |
| 4       | 103 | -4,865  | 7        |
| 2       | 6   | -1,215  | 5        |
| 2       | 4   | -4,680  | 8        |
| 3       | 7   | 0,758   | 5        |
| 3       | 101 | 4,074   | 7        |
| 1       | 102 | 2,555   | 8        |
| 5       | 6   | 7,164   | 6        |
| 3       | 5   | -1,511  | 6        |
| 2       | 3   | -6,872  | 6        |
| 1       | 7   | 10,812  | 6        |
| 4       | 5   | -3,700  | 4        |
| 4       | 7   | -1,438  | 5        |
| 1       | 6   | 15,701  | 6        |

## Zestaw 19

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 3       | 7   | 0,750   | 8        |
| 1       | 6   | 15,708  | 7        |
| 1       | 3   | 10,053  | 5        |
| 1       | 7   | 10,803  | 6        |
| 5       | 7   | 2,270   | 7        |
| 5       | 101 | 5,592   | 3        |
| 2       | 4   | -4,683  | 5        |
| 6       | 103 | -8,318  | 7        |
| 2       | 5   | -8,383  | 3        |
| 1       | 5   | 8,546   | 3        |
| 5       | 6   | 7,156   | 3        |
| 3       | 4   | 2,188   | 6        |
| 2       | 6   | -1,224  | 4        |
| 1       | 102 | 2,554   | 7        |

## Zestaw 20

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 3   | 10,055  | 7        |
| 6       | 102 | -13,149 | 6        |
| 3       | 7   | 0,751   | 3        |
| 1       | 103 | 7,384   | 4        |
| 1       | 4   | 12,245  | 5        |
| 4       | 6   | 3,461   | 6        |
| 2       | 7   | -6,116  | 5        |
| 1       | 2   | 16,924  | 4        |
| 1       | 6   | 15,699  | 5        |
| 4       | 101 | 1,886   | 5        |
| 5       | 6   | 7,165   | 7        |
| 4       | 5   | -3,705  | 4        |
| 2       | 3   | -6,867  | 7        |
| 3       | 5   | -1,504  | 7        |

## Zestaw 21

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 5   | -8,377  | 6        |
| 1       | 3   | 10,055  | 7        |
| 1       | 6   | 15,707  | 5        |
| 3       | 4   | 2,199   | 7        |
| 3       | 7   | 0,752   | 5        |
| 2       | 6   | -1,225  | 4        |
| 5       | 6   | 7,162   | 6        |
| 7       | 102 | -8,252  | 7        |
| 1       | 2   | 16,919  | 7        |
| 5       | 7   | 2,261   | 6        |
| 1       | 4   | 12,251  | 6        |
| 6       | 101 | -1,573  | 3        |
| 3       | 6   | 5,654   | 3        |
| 3       | 103 | -2,670  | 4        |

## Zestaw 22

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 6   | 15,706  | 6        |
| 3       | 103 | -2,669  | 7        |
| 4       | 6   | 3,453   | 4        |
| 1       | 7   | 10,804  | 5        |
| 3       | 4   | 2,198   | 7        |
| 6       | 102 | -13,145 | 7        |
| 5       | 6   | 7,160   | 3        |
| 4       | 5   | -3,707  | 3        |
| 2       | 3   | -6,871  | 4        |
| 3       | 7   | 0,753   | 5        |
| 2       | 6   | -1,221  | 3        |
| 4       | 101 | 1,889   | 8        |
| 2       | 7   | -6,113  | 3        |
| 2       | 5   | -8,375  | 5        |

## Zestaw 23

|   |     | $h$ [m] | $m$ [mm] |
|---|-----|---------|----------|
| 2 | 6   | -1,216  | 6        |
| 3 | 5   | -1,506  | 3        |
| 1 | 6   | 15,700  | 4        |
| 2 | 101 | -2,797  | 4        |
| 3 | 102 | -7,494  | 3        |
| 1 | 7   | 10,811  | 5        |
| 1 | 103 | 7,387   | 4        |
| 5 | 6   | 7,160   | 7        |
| 3 | 4   | 2,199   | 5        |
| 2 | 7   | -6,116  | 8        |
| 4 | 7   | -1,433  | 6        |
| 4 | 6   | 3,454   | 7        |
| 1 | 4   | 12,247  | 8        |
| 3 | 7   | 0,757   | 4        |



## Zestaw 24

|   |     | $h$ [m] | $m$ [mm] |
|---|-----|---------|----------|
| 7 | 102 | -8,247  | 5        |
| 2 | 4   | -4,673  | 5        |
| 4 | 7   | -1,438  | 5        |
| 5 | 7   | 2,259   | 4        |
| 3 | 103 | -2,672  | 3        |
| 1 | 3   | 10,047  | 5        |
| 5 | 101 | 5,590   | 3        |
| 2 | 3   | -6,873  | 7        |
| 2 | 7   | -6,119  | 7        |
| 5 | 6   | 7,162   | 6        |
| 4 | 6   | 3,463   | 4        |
| 1 | 6   | 15,708  | 5        |
| 2 | 5   | -8,382  | 6        |
| 1 | 7   | 10,804  | 8        |

## Zestaw 25

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 2   | 16,925  | 4        |
| 3       | 102 | -7,495  | 4        |
| 4       | 6   | 3,456   | 8        |
| 1       | 6   | 15,699  | 6        |
| 4       | 7   | -1,439  | 6        |
| 1       | 4   | 12,249  | 7        |
| 2       | 101 | -2,794  | 4        |
| 2       | 3   | -6,869  | 7        |
| 3       | 4   | 2,196   | 8        |
| 2       | 5   | -8,375  | 8        |
| 5       | 7   | 2,270   | 6        |
| 1       | 7   | 10,806  | 8        |
| 5       | 6   | 7,156   | 4        |
| 6       | 103 | -8,322  | 7        |

## Zestaw 26

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 5       | 6   | 7,162   | 6        |
| 2       | 4   | -4,676  | 3        |
| 5       | 7   | 2,265   | 4        |
| 4       | 102 | -9,692  | 6        |
| 1       | 7   | 10,812  | 3        |
| 4       | 5   | -3,702  | 4        |
| 6       | 103 | -8,326  | 6        |
| 1       | 3   | 10,052  | 3        |
| 1       | 5   | 8,539   | 6        |
| 1       | 2   | 16,917  | 7        |
| 3       | 6   | 5,656   | 6        |
| 3       | 4   | 2,198   | 7        |
| 2       | 6   | -1,218  | 5        |
| 2       | 101 | -2,791  | 6        |

## Zestaw 27

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 1       | 3       | 10,053   | 4 |
| 4       | 6       | 3,463    | 3 |
| 2       | 4       | -4,676   | 6 |
| 3       | 6       | 5,654    | 4 |
| 2       | 6       | -1,222   | 8 |
| 1       | 7       | 10,808   | 6 |
| 7       | 101     | 3,327    | 8 |
| 1       | 6       | 15,698   | 3 |
| 1       | 102     | 2,557    | 8 |
| 2       | 3       | -6,877   | 8 |
| 1       | 5       | 8,546    | 5 |
| 3       | 5       | -1,508   | 6 |
| 4       | 103     | -4,857   | 7 |
| 4       | 7       | -1,439   | 7 |

## Zestaw 28

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 3       | 6   | 5,654   | 5        |
| 1       | 2   | 16,921  | 6        |
| 2       | 103 | -9,543  | 3        |
| 3       | 7   | 0,759   | 3        |
| 4       | 6   | 3,456   | 8        |
| 5       | 6   | 7,165   | 8        |
| 1       | 7   | 10,804  | 5        |
| 1       | 3   | 10,054  | 8        |
| 3       | 101 | 4,077   | 8        |
| 1       | 5   | 8,544   | 6        |
| 5       | 7   | 2,270   | 3        |
| 5       | 102 | -5,986  | 8        |
| 2       | 4   | -4,673  | 5        |
| 3       | 4   | 2,195   | 7        |

## Zestaw 29

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 3   | 10,047  | 5        |
| 5       | 101 | 5,590   | 3        |
| 5       | 6   | 7,162   | 6        |
| 2       | 4   | -4,673  | 5        |
| 4       | 6   | 3,463   | 4        |
| 3       | 103 | -2,672  | 3        |
| 5       | 7   | 2,259   | 4        |
| 7       | 102 | -8,247  | 5        |
| 2       | 7   | -6,119  | 7        |
| 1       | 7   | 10,804  | 8        |
| 1       | 6   | 15,708  | 5        |
| 2       | 3   | -6,873  | 7        |
| 4       | 7   | -1,438  | 5        |
| 2       | 5   | -8,382  | 6        |

## Zestaw 30

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 5       | 103 | -1,156  | 5        |
| 5       | 6   | 7,160   | 6        |
| 1       | 102 | 2,556   | 8        |
| 5       | 7   | 2,267   | 8        |
| 2       | 4   | -4,683  | 4        |
| 4       | 7   | -1,435  | 4        |
| 1       | 6   | 15,706  | 8        |
| 2       | 3   | -6,872  | 5        |
| 3       | 101 | 4,077   | 5        |
| 3       | 4   | 2,192   | 4        |
| 1       | 7   | 10,802  | 3        |
| 3       | 6   | 5,646   | 3        |
| 1       | 3   | 10,057  | 6        |
| 2       | 5   | -8,379  | 5        |

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## Zestaw 31

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 3       | 7   | 0,759   | 7        |
| 2       | 7   | -6,119  | 4        |
| 2       | 3   | -6,872  | 3        |
| 2       | 5   | -8,385  | 7        |
| 1       | 5   | 8,542   | 5        |
| 2       | 103 | -9,534  | 6        |
| 5       | 102 | -5,989  | 3        |
| 1       | 6   | 15,702  | 5        |
| 3       | 101 | 4,081   | 7        |
| 1       | 3   | 10,046  | 4        |
| 3       | 6   | 5,656   | 8        |
| 4       | 6   | 3,453   | 8        |
| 2       | 4   | -4,682  | 7        |
| 5       | 6   | 7,162   | 7        |



## Zestaw 32

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 7   | 10,806  | 7        |
| 3       | 6   | 5,648   | 4        |
| 2       | 6   | -1,218  | 7        |
| 3       | 5   | -1,509  | 3        |
| 1       | 4   | 12,246  | 6        |
| 5       | 102 | -5,986  | 5        |
| 4       | 5   | -3,702  | 6        |
| 1       | 2   | 16,917  | 8        |
| 2       | 101 | -2,798  | 5        |
| 2       | 4   | -4,682  | 7        |
| 4       | 103 | -4,857  | 3        |
| 5       | 6   | 7,162   | 5        |
| 3       | 7   | 0,760   | 4        |
| 1       | 6   | 15,698  | 7        |

## Zestaw 33

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 4       | 7   | -1,436  | 4        |
| 5       | 6   | 7,162   | 8        |
| 1       | 6   | 15,704  | 7        |
| 2       | 7   | -6,118  | 4        |
| 3       | 6   | 5,653   | 8        |
| 4       | 102 | -9,685  | 5        |
| 1       | 5   | 8,544   | 5        |
| 5       | 7   | 2,263   | 7        |
| 2       | 101 | -2,792  | 5        |
| 1       | 2   | 16,925  | 8        |
| 1       | 7   | 10,807  | 3        |
| 6       | 103 | -8,324  | 8        |
| 2       | 5   | -8,378  | 4        |
| 3       | 4   | 2,190   | 7        |

## Zestaw 34

|   |     | $h$ [m] | $m$ [mm] |
|---|-----|---------|----------|
| 1 | 6   | 15,704  | 3        |
| 7 | 101 | 3,325   | 3        |
| 2 | 6   | -1,221  | 5        |
| 4 | 7   | -1,443  | 5        |
| 3 | 102 | -7,489  | 5        |
| 2 | 7   | -6,110  | 4        |
| 6 | 103 | -8,324  | 8        |
| 2 | 3   | -6,870  | 4        |
| 1 | 4   | 12,244  | 8        |
| 1 | 7   | 10,810  | 3        |
| 4 | 6   | 3,453   | 7        |
| 3 | 6   | 5,654   | 5        |
| 1 | 5   | 8,541   | 6        |
| 2 | 5   | -8,385  | 3        |

## Zestaw 35

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 6   | 15,705  | 8        |
| 3       | 103 | -2,666  | 6        |
| 2       | 7   | -6,113  | 8        |
| 5       | 7   | 2,259   | 5        |
| 5       | 102 | -5,983  | 4        |
| 1       | 4   | 12,247  | 3        |
| 4       | 6   | 3,455   | 5        |
| 6       | 101 | -1,578  | 8        |
| 2       | 5   | -8,383  | 7        |
| 3       | 6   | 5,650   | 8        |
| 3       | 7   | 0,754   | 6        |
| 1       | 2   | 16,927  | 4        |
| 2       | 6   | -1,225  | 4        |
| 1       | 7   | 10,807  | 8        |

## Zestaw 36

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 2       | 101 | -2,791  | 3        |
| 2       | 4   | -4,680  | 6        |
| 4       | 5   | -3,707  | 4        |
| 2       | 3   | -6,874  | 8        |
| 5       | 6   | 7,164   | 6        |
| 5       | 7   | 2,269   | 5        |
| 3       | 4   | 2,195   | 7        |
| 4       | 102 | -9,691  | 6        |
| 2       | 6   | -1,221  | 3        |
| 1       | 4   | 12,251  | 5        |
| 3       | 7   | 0,757   | 5        |
| 1       | 3   | 10,053  | 6        |
| 3       | 103 | -2,667  | 8        |
| 1       | 6   | 15,702  | 7        |

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## Zestaw 37

| <hr/>   |     |         |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 2       | 5   | -8,383  | 7        |
| 3       | 103 | -2,666  | 6        |
| 3       | 6   | 5,650   | 8        |
| 1       | 6   | 15,705  | 8        |
| 2       | 6   | -1,225  | 4        |
| 1       | 4   | 12,247  | 3        |
| 6       | 101 | -1,578  | 8        |
| 4       | 6   | 3,455   | 5        |
| 2       | 7   | -6,113  | 8        |
| 1       | 2   | 16,927  | 4        |
| 3       | 7   | 0,754   | 6        |
| 5       | 7   | 2,259   | 5        |
| 1       | 7   | 10,807  | 8        |
| 5       | 102 | -5,983  | 4        |

## Zestaw 38

|   |     | $h$ [m] | $m$ [mm] |
|---|-----|---------|----------|
| 1 | 6   | 15,698  | 6        |
| 2 | 3   | -6,873  | 4        |
| 4 | 6   | 3,455   | 5        |
| 3 | 5   | -1,508  | 6        |
| 2 | 5   | -8,385  | 4        |
| 5 | 6   | 7,156   | 5        |
| 7 | 102 | -8,254  | 5        |
| 3 | 7   | 0,757   | 5        |
| 3 | 103 | -2,669  | 8        |
| 2 | 7   | -6,111  | 8        |
| 1 | 3   | 10,050  | 8        |
| 4 | 7   | -1,439  | 6        |
| 5 | 7   | 2,265   | 8        |
| 5 | 101 | 5,587   | 6        |

## Zestaw 39

|   |     | $h$ [m] | $m$ [mm] |
|---|-----|---------|----------|
| 1 | 101 | 14,128  | 7        |
| 3 | 6   | 5,652   | 7        |
| 2 | 3   | -6,868  | 4        |
| 1 | 6   | 15,707  | 6        |
| 6 | 103 | -8,319  | 3        |
| 5 | 102 | -5,986  | 6        |
| 3 | 7   | 0,761   | 6        |
| 3 | 4   | 2,198   | 4        |
| 4 | 7   | -1,439  | 7        |
| 1 | 7   | 10,812  | 5        |
| 5 | 6   | 7,165   | 4        |
| 2 | 7   | -6,117  | 3        |
| 1 | 4   | 12,240  | 4        |
| 2 | 5   | -8,382  | 3        |



## Zestaw 40

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 4       | 6   | 3,457   | 6        |
| 1       | 101 | 14,125  | 6        |
| 2       | 3   | -6,871  | 3        |
| 1       | 2   | 16,926  | 8        |
| 5       | 7   | 2,261   | 8        |
| 4       | 7   | -1,441  | 4        |
| 1       | 3   | 10,057  | 6        |
| 1       | 4   | 12,242  | 4        |
| 3       | 6   | 5,655   | 3        |
| 5       | 103 | -1,155  | 7        |
| 2       | 5   | -8,380  | 8        |
| 6       | 102 | -13,145 | 8        |
| 5       | 6   | 7,159   | 3        |
| 3       | 4   | 2,198   | 7        |

## Zestaw 41

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 3   | 10,056  | 7        |
| 3       | 103 | -2,667  | 4        |
| 5       | 7   | 2,268   | 3        |
| 6       | 102 | -13,152 | 7        |
| 2       | 3   | -6,872  | 3        |
| 2       | 4   | -4,683  | 6        |
| 4       | 5   | -3,706  | 3        |
| 7       | 101 | 3,328   | 5        |
| 2       | 6   | -1,221  | 4        |
| 5       | 6   | 7,163   | 4        |
| 1       | 7   | 10,806  | 6        |
| 4       | 6   | 3,457   | 3        |
| 4       | 7   | -1,443  | 4        |
| 2       | 7   | -6,119  | 6        |

## Zestaw 42

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 4       | 5   | -3,708  | 3        |
| 5       | 101 | 5,593   | 8        |
| 2       | 4   | -4,683  | 7        |
| 4       | 6   | 3,462   | 3        |
| 3       | 6   | 5,656   | 5        |
| 2       | 5   | -8,383  | 7        |
| 1       | 7   | 10,812  | 4        |
| 2       | 7   | -6,115  | 8        |
| 1       | 3   | 10,046  | 5        |
| 6       | 103 | -8,318  | 5        |
| 1       | 2   | 16,926  | 4        |
| 4       | 102 | -9,690  | 5        |
| 3       | 7   | 0,753   | 7        |
| 3       | 4   | 2,195   | 5        |

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## Zestaw 43

| <hr/>   |     |         |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 2       | 5   | -8,385  | 4        |
| 4       | 103 | -4,859  | 3        |
| 3       | 102 | -7,496  | 3        |
| 1       | 6   | 15,706  | 6        |
| 2       | 4   | -4,677  | 8        |
| 4       | 5   | -3,702  | 7        |
| 4       | 7   | -1,438  | 4        |
| 3       | 6   | 5,649   | 5        |
| 1       | 101 | 14,129  | 8        |
| 3       | 7   | 0,759   | 8        |
| 2       | 3   | -6,876  | 3        |
| 1       | 4   | 12,246  | 8        |
| 2       | 7   | -6,114  | 7        |
| 1       | 7   | 10,809  | 5        |
| <hr/>   |     |         |          |

## Zestaw 44

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 6   | -1,217  | 5        |
| 6       | 101 | -1,577  | 4        |
| 5       | 7   | 2,270   | 4        |
| 1       | 2   | 16,922  | 4        |
| 3       | 7   | 0,755   | 3        |
| 1       | 103 | 7,389   | 3        |
| 5       | 6   | 7,165   | 3        |
| 1       | 4   | 12,243  | 3        |
| 3       | 5   | -1,505  | 5        |
| 2       | 4   | -4,674  | 8        |
| 3       | 4   | 2,188   | 8        |
| 2       | 102 | -14,365 | 7        |
| 2       | 5   | -8,379  | 5        |
| 4       | 7   | -1,439  | 8        |

## Zestaw 45

|   |     | $h$ [m] | $m$ [mm] |
|---|-----|---------|----------|
| 1 | 103 | 7,389   | 3        |
| 2 | 6   | -1,217  | 5        |
| 5 | 7   | 2,270   | 4        |
| 2 | 102 | -14,365 | 7        |
| 3 | 5   | -1,505  | 5        |
| 3 | 7   | 0,755   | 3        |
| 2 | 4   | -4,674  | 8        |
| 3 | 4   | 2,188   | 8        |
| 1 | 4   | 12,243  | 3        |
| 2 | 5   | -8,379  | 5        |
| 4 | 7   | -1,439  | 8        |
| 1 | 2   | 16,922  | 4        |
| 6 | 101 | -1,577  | 4        |
| 5 | 6   | 7,165   | 3        |

## Zestaw 46

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 6   | -1,224  | 4        |
| 4       | 5   | -3,707  | 5        |
| 1       | 3   | 10,049  | 8        |
| 1       | 2   | 16,922  | 8        |
| 7       | 102 | -8,254  | 3        |
| 1       | 5   | 8,546   | 6        |
| 3       | 6   | 5,650   | 8        |
| 2       | 7   | -6,118  | 6        |
| 3       | 101 | 4,079   | 6        |
| 2       | 103 | -9,544  | 4        |
| 2       | 5   | -8,380  | 5        |
| 1       | 6   | 15,707  | 6        |
| 4       | 7   | -1,433  | 3        |
| 3       | 7   | 0,751   | 5        |

## Zestaw 47

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 6   | -1,217  | 4        |
| 1       | 7   | 10,805  | 7        |
| 3       | 4   | 2,188   | 4        |
| 4       | 6   | 3,453   | 3        |
| 4       | 7   | -1,434  | 6        |
| 5       | 6   | 7,165   | 8        |
| 5       | 102 | -5,991  | 8        |
| 5       | 7   | 2,268   | 6        |
| 3       | 7   | 0,754   | 8        |
| 2       | 5   | -8,385  | 6        |
| 1       | 2   | 16,925  | 6        |
| 2       | 101 | -2,788  | 6        |
| 1       | 3   | 10,054  | 7        |
| 3       | 103 | -2,672  | 7        |



## Zestaw 48

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 1       | 4       | 12,246   | 8 |
| 1       | 7       | 10,809   | 5 |
| 2       | 3       | -6,876   | 3 |
| 1       | 101     | 14,129   | 8 |
| 2       | 5       | -8,385   | 4 |
| 4       | 103     | -4,859   | 3 |
| 3       | 6       | 5,649    | 5 |
| 4       | 5       | -3,702   | 7 |
| 2       | 7       | -6,114   | 7 |
| 4       | 7       | -1,438   | 4 |
| 2       | 4       | -4,677   | 8 |
| 3       | 7       | 0,759    | 8 |
| 3       | 102     | -7,496   | 3 |
| 1       | 6       | 15,706   | 6 |

## Zestaw 49

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 2       | 5       | -8,383   | 3 |
| 5       | 6       | 7,156    | 3 |
| 1       | 7       | 10,803   | 6 |
| 1       | 5       | 8,546    | 3 |
| 5       | 7       | 2,270    | 7 |
| 1       | 3       | 10,053   | 5 |
| 1       | 6       | 15,708   | 7 |
| 3       | 7       | 0,750    | 8 |
| 3       | 4       | 2,188    | 6 |
| 2       | 4       | -4,683   | 5 |
| 5       | 101     | 5,592    | 3 |
| 1       | 102     | 2,554    | 7 |
| 2       | 6       | -1,224   | 4 |
| 6       | 103     | -8,318   | 7 |

## Zestaw 50

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 5   | -8,382  | 5        |
| 3       | 6   | 5,646   | 7        |
| 5       | 6   | 7,156   | 6        |
| 3       | 7   | 0,756   | 5        |
| 4       | 7   | -1,441  | 7        |
| 1       | 4   | 12,244  | 7        |
| 2       | 3   | -6,872  | 3        |
| 1       | 103 | 7,387   | 6        |
| 4       | 5   | -3,703  | 4        |
| 1       | 5   | 8,540   | 4        |
| 1       | 2   | 16,928  | 6        |
| 6       | 102 | -13,148 | 6        |
| 4       | 101 | 1,880   | 6        |
| 4       | 6   | 3,460   | 3        |

## Zestaw 51

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 5   | 8,545   | 4        |
| 7       | 101 | 3,322   | 8        |
| 2       | 5   | -8,380  | 6        |
| 3       | 6   | 5,651   | 6        |
| 4       | 6   | 3,455   | 3        |
| 6       | 103 | -8,321  | 3        |
| 1       | 6   | 15,701  | 3        |
| 3       | 7   | 0,756   | 6        |
| 4       | 7   | -1,434  | 4        |
| 4       | 102 | -9,684  | 7        |
| 3       | 4   | 2,198   | 5        |
| 1       | 4   | 12,242  | 3        |
| 1       | 2   | 16,921  | 7        |
| 5       | 7   | 2,268   | 7        |

## Zestaw 52

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 5   | -8,382  | 6        |
| 7       | 102 | -8,247  | 5        |
| 5       | 7   | 2,259   | 4        |
| 4       | 6   | 3,463   | 4        |
| 5       | 101 | 5,590   | 3        |
| 3       | 103 | -2,672  | 3        |
| 4       | 7   | -1,438  | 5        |
| 2       | 3   | -6,873  | 7        |
| 1       | 6   | 15,708  | 5        |
| 1       | 7   | 10,804  | 8        |
| 5       | 6   | 7,162   | 6        |
| 2       | 7   | -6,119  | 7        |
| 2       | 4   | -4,673  | 5        |
| 1       | 3   | 10,047  | 5        |

## Zestaw 53

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 1       | 5       | 8,538    | 3 |
| 2       | 7       | -6,110   | 3 |
| 3       | 6       | 5,651    | 5 |
| 3       | 7       | 0,753    | 8 |
| 4       | 6       | 3,455    | 7 |
| 1       | 6       | 15,706   | 5 |
| 1       | 101     | 14,136   | 4 |
| 6       | 103     | -8,318   | 6 |
| 7       | 102     | -8,247   | 6 |
| 3       | 4       | 2,192    | 4 |
| 5       | 6       | 7,159    | 6 |
| 5       | 7       | 2,267    | 7 |
| 1       | 7       | 10,812   | 3 |
| 2       | 3       | -6,875   | 8 |

## Zestaw 54

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 2       | 7       | -6,117   | 3 |
| 3       | 7       | 0,761    | 6 |
| 1       | 4       | 12,240   | 4 |
| 1       | 7       | 10,812   | 5 |
| 3       | 4       | 2,198    | 4 |
| 2       | 5       | -8,382   | 3 |
| 4       | 7       | -1,439   | 7 |
| 1       | 6       | 15,707   | 6 |
| 3       | 6       | 5,652    | 7 |
| 5       | 6       | 7,165    | 4 |
| 2       | 3       | -6,868   | 4 |
| 5       | 102     | -5,986   | 6 |
| 1       | 101     | 14,128   | 7 |
| 6       | 103     | -8,319   | 3 |

## Zestaw 55

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 3   | -6,867  | 3        |
| 5       | 6   | 7,156   | 4        |
| 4       | 102 | -9,685  | 7        |
| 1       | 6   | 15,699  | 7        |
| 1       | 5   | 8,540   | 7        |
| 3       | 7   | 0,755   | 5        |
| 5       | 7   | 2,260   | 5        |
| 4       | 5   | -3,709  | 7        |
| 4       | 6   | 3,454   | 8        |
| 2       | 7   | -6,111  | 3        |
| 2       | 101 | -2,791  | 5        |
| 3       | 6   | 5,655   | 3        |
| 6       | 103 | -8,326  | 4        |
| 1       | 3   | 10,047  | 3        |



## Zestaw 56

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 4       | 6       | 3,461    | 3 |
| 4       | 7       | -1,436   | 7 |
| 1       | 3       | 10,048   | 7 |
| 3       | 7       | 0,752    | 3 |
| 2       | 5       | -8,381   | 5 |
| 2       | 6       | -1,225   | 7 |
| 2       | 7       | -6,110   | 3 |
| 3       | 4       | 2,196    | 3 |
| 5       | 7       | 2,270    | 4 |
| 5       | 101     | 5,584    | 5 |
| 4       | 102     | -9,692   | 5 |
| 1       | 103     | 7,387    | 7 |
| 3       | 5       | -1,508   | 7 |
| 1       | 6       | 15,700   | 8 |

## Zestaw 57

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 2       | 3   | -6,875  | 8        |
| 3       | 7   | 0,753   | 8        |
| 7       | 102 | -8,247  | 6        |
| 5       | 6   | 7,159   | 6        |
| 3       | 4   | 2,192   | 4        |
| 4       | 6   | 3,455   | 7        |
| 1       | 6   | 15,706  | 5        |
| 5       | 7   | 2,267   | 7        |
| 1       | 5   | 8,538   | 3        |
| 3       | 6   | 5,651   | 5        |
| 1       | 7   | 10,812  | 3        |
| 2       | 7   | -6,110  | 3        |
| 1       | 101 | 14,136  | 4        |
| 6       | 103 | -8,318  | 6        |

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## Zestaw 58

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 4       | 6   | 3,453   | 8        |
| 1       | 6   | 15,702  | 5        |
| 5       | 102 | -5,989  | 3        |
| 2       | 3   | -6,872  | 3        |
| 2       | 4   | -4,682  | 7        |
| 3       | 7   | 0,759   | 7        |
| 2       | 103 | -9,534  | 6        |
| 3       | 6   | 5,656   | 8        |
| 3       | 101 | 4,081   | 7        |
| 5       | 6   | 7,162   | 7        |
| 2       | 7   | -6,119  | 4        |
| 1       | 3   | 10,046  | 4        |
| 2       | 5   | -8,385  | 7        |
| 1       | 5   | 8,542   | 5        |

## Zestaw 59

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 3   | 10,055  | 7        |
| 4       | 7   | -1,433  | 4        |
| 5       | 6   | 7,162   | 3        |
| 4       | 102 | -9,690  | 7        |
| 2       | 5   | -8,376  | 6        |
| 1       | 101 | 14,127  | 8        |
| 5       | 7   | 2,262   | 3        |
| 6       | 103 | -8,324  | 4        |
| 2       | 3   | -6,872  | 7        |
| 3       | 6   | 5,646   | 4        |
| 1       | 7   | 10,805  | 4        |
| 4       | 5   | -3,701  | 8        |
| 4       | 6   | 3,460   | 3        |
| 1       | 6   | 15,703  | 3        |

## Zestaw 60

|   |     | $h$ [m] | $m$ [mm] |
|---|-----|---------|----------|
| 4 | 103 | -4,859  | 8        |
| 2 | 6   | -1,214  | 8        |
| 1 | 102 | 2,552   | 8        |
| 5 | 7   | 2,268   | 5        |
| 7 | 101 | 3,325   | 5        |
| 1 | 5   | 8,538   | 7        |
| 4 | 6   | 3,463   | 4        |
| 5 | 6   | 7,165   | 4        |
| 1 | 7   | 10,810  | 3        |
| 4 | 5   | -3,701  | 6        |
| 1 | 2   | 16,924  | 5        |
| 3 | 6   | 5,655   | 8        |
| 3 | 7   | 0,757   | 3        |
| 2 | 3   | -6,870  | 7        |

## Zestaw 61

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 4       | 6       | 3,463    | 4 |
| 1       | 3       | 10,047   | 5 |
| 5       | 6       | 7,162    | 6 |
| 2       | 7       | -6,119   | 7 |
| 5       | 7       | 2,259    | 4 |
| 1       | 6       | 15,708   | 5 |
| 4       | 7       | -1,438   | 5 |
| 5       | 101     | 5,590    | 3 |
| 7       | 102     | -8,247   | 5 |
| 2       | 5       | -8,382   | 6 |
| 3       | 103     | -2,672   | 3 |
| 1       | 7       | 10,804   | 8 |
| 2       | 4       | -4,673   | 5 |
| 2       | 3       | -6,873   | 7 |

## Zestaw 62

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 4       | 5   | -3,709  | 8        |
| 5       | 6   | 7,166   | 4        |
| 1       | 6   | 15,702  | 8        |
| 1       | 4   | 12,250  | 8        |
| 1       | 2   | 16,926  | 5        |
| 3       | 6   | 5,656   | 4        |
| 2       | 4   | -4,678  | 3        |
| 2       | 3   | -6,873  | 3        |
| 1       | 5   | 8,542   | 3        |
| 3       | 103 | -2,672  | 7        |
| 4       | 102 | -9,691  | 6        |
| 4       | 7   | -1,443  | 4        |
| 5       | 101 | 5,590   | 3        |
| 2       | 7   | -6,112  | 6        |

## Zestaw 63

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 2       | 6   | -1,223  | 5        |
| 1       | 2   | 16,917  | 5        |
| 1       | 6   | 15,707  | 5        |
| 2       | 5   | -8,375  | 8        |
| 4       | 101 | 1,879   | 4        |
| 1       | 3   | 10,048  | 4        |
| 3       | 7   | 0,759   | 6        |
| 2       | 102 | -14,366 | 6        |
| 4       | 7   | -1,444  | 8        |
| 4       | 6   | 3,460   | 6        |
| 2       | 4   | -4,680  | 4        |
| 6       | 103 | -8,318  | 6        |
| 4       | 5   | -3,707  | 4        |
| 5       | 6   | 7,161   | 6        |

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## Zestaw 64

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 6   | 15,698  | 7        |
| 4       | 103 | -4,857  | 3        |
| 2       | 101 | -2,798  | 5        |
| 4       | 5   | -3,702  | 6        |
| 2       | 4   | -4,682  | 7        |
| 3       | 7   | 0,760   | 4        |
| 1       | 2   | 16,917  | 8        |
| 3       | 5   | -1,509  | 3        |
| 2       | 6   | -1,218  | 7        |
| 1       | 4   | 12,246  | 6        |
| 5       | 6   | 7,162   | 5        |
| 1       | 7   | 10,806  | 7        |
| 3       | 6   | 5,648   | 4        |
| 5       | 102 | -5,986  | 5        |

## Zestaw 65

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 2       | 5       | -8,385   | 7 |
| 2       | 7       | -6,119   | 4 |
| 2       | 103     | -9,534   | 6 |
| 1       | 3       | 10,046   | 4 |
| 1       | 5       | 8,542    | 5 |
| 5       | 102     | -5,989   | 3 |
| 1       | 6       | 15,702   | 5 |
| 3       | 7       | 0,759    | 7 |
| 3       | 6       | 5,656    | 8 |
| 2       | 4       | -4,682   | 7 |
| 4       | 6       | 3,453    | 8 |
| 2       | 3       | -6,872   | 3 |
| 5       | 6       | 7,162    | 7 |
| 3       | 101     | 4,081    | 7 |

## Zestaw 66

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 6   | 15,701  | 8        |
| 3       | 5   | -1,506  | 4        |
| 3       | 7   | 0,753   | 4        |
| 5       | 7   | 2,266   | 4        |
| 2       | 4   | -4,678  | 8        |
| 3       | 103 | -2,664  | 7        |
| 2       | 5   | -8,380  | 3        |
| 2       | 102 | -14,364 | 5        |
| 2       | 3   | -6,867  | 3        |
| 1       | 5   | 8,541   | 5        |
| 1       | 4   | 12,251  | 6        |
| 5       | 101 | 5,584   | 3        |
| 1       | 2   | 16,921  | 5        |
| 4       | 6   | 3,460   | 3        |

## Zestaw 67

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 5       | 101 | 5,592   | 3        |
| 1       | 7   | 10,803  | 6        |
| 1       | 6   | 15,708  | 7        |
| 3       | 4   | 2,188   | 6        |
| 1       | 5   | 8,546   | 3        |
| 2       | 5   | -8,383  | 3        |
| 3       | 7   | 0,750   | 8        |
| 2       | 6   | -1,224  | 4        |
| 6       | 103 | -8,318  | 7        |
| 1       | 3   | 10,053  | 5        |
| 5       | 6   | 7,156   | 3        |
| 1       | 102 | 2,554   | 7        |
| 5       | 7   | 2,270   | 7        |
| 2       | 4   | -4,683  | 5        |

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## Zestaw 68

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 6       | 103 | -8,318  | 6        |
| 2       | 4   | -4,680  | 4        |
| 4       | 6   | 3,460   | 6        |
| 2       | 6   | -1,223  | 5        |
| 2       | 102 | -14,366 | 6        |
| 4       | 5   | -3,707  | 4        |
| 1       | 6   | 15,707  | 5        |
| 4       | 101 | 1,879   | 4        |
| 5       | 6   | 7,161   | 6        |
| 4       | 7   | -1,444  | 8        |
| 2       | 5   | -8,375  | 8        |
| 1       | 2   | 16,917  | 5        |
| 1       | 3   | 10,048  | 4        |
| 3       | 7   | 0,759   | 6        |

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## Zestaw 69

|   |         | <hr/>   |          |
|---|---------|---------|----------|
|   | odcinek | $h$ [m] | $m$ [mm] |
|   |         | <hr/>   |          |
| 5 | 101     | 5,591   | 5        |
| 2 | 3       | -6,876  | 5        |
| 2 | 102     | -14,365 | 8        |
| 5 | 6       | 7,163   | 5        |
| 2 | 7       | -6,116  | 8        |
| 5 | 7       | 2,269   | 3        |
| 1 | 2       | 16,921  | 8        |
| 1 | 103     | 7,385   | 3        |
| 4 | 6       | 3,457   | 8        |
| 3 | 4       | 2,195   | 8        |
| 1 | 5       | 8,546   | 5        |
| 3 | 5       | -1,509  | 7        |
| 1 | 7       | 10,812  | 3        |
| 3 | 6       | 5,651   | 5        |

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## Zestaw 70

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 3       | 4   | 2,195   | 7        |
| 3       | 101 | 4,077   | 8        |
| 1       | 2   | 16,921  | 6        |
| 1       | 3   | 10,054  | 8        |
| 2       | 103 | -9,543  | 3        |
| 2       | 4   | -4,673  | 5        |
| 1       | 5   | 8,544   | 6        |
| 3       | 6   | 5,654   | 5        |
| 5       | 6   | 7,165   | 8        |
| 3       | 7   | 0,759   | 3        |
| 5       | 7   | 2,270   | 3        |
| 5       | 102 | -5,986  | 8        |
| 4       | 6   | 3,456   | 8        |
| 1       | 7   | 10,804  | 5        |

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## Zestaw 71

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 3       | 7   | 0,755   | 4        |
| 5       | 7   | 2,260   | 6        |
| 1       | 3   | 10,056  | 5        |
| 3       | 6   | 5,650   | 5        |
| 5       | 6   | 7,163   | 7        |
| 3       | 4   | 2,190   | 5        |
| 6       | 103 | -8,319  | 5        |
| 4       | 7   | -1,435  | 5        |
| 1       | 6   | 15,706  | 8        |
| 2       | 4   | -4,681  | 3        |
| 2       | 101 | -2,788  | 6        |
| 3       | 102 | -7,489  | 8        |
| 1       | 5   | 8,547   | 4        |
| 2       | 6   | -1,223  | 4        |



## Zestaw 72

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 5       | 7   | 2,260   | 6        |
| 3       | 7   | 0,755   | 4        |
| 2       | 4   | -4,681  | 3        |
| 4       | 7   | -1,435  | 5        |
| 3       | 102 | -7,489  | 8        |
| 5       | 6   | 7,163   | 7        |
| 2       | 101 | -2,788  | 6        |
| 1       | 5   | 8,547   | 4        |
| 1       | 6   | 15,706  | 8        |
| 2       | 6   | -1,223  | 4        |
| 3       | 6   | 5,650   | 5        |
| 3       | 4   | 2,190   | 5        |
| 6       | 103 | -8,319  | 5        |
| 1       | 3   | 10,056  | 5        |

## Zestaw 73

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 4   | -4,673  | 8        |
| 3       | 6   | 5,647   | 3        |
| 5       | 101 | 5,587   | 8        |
| 2       | 3   | -6,870  | 8        |
| 1       | 7   | 10,802  | 8        |
| 4       | 7   | -1,434  | 5        |
| 1       | 2   | 16,928  | 8        |
| 5       | 7   | 2,263   | 6        |
| 6       | 102 | -13,152 | 7        |
| 1       | 5   | 8,544   | 4        |
| 4       | 6   | 3,460   | 8        |
| 3       | 7   | 0,751   | 3        |
| 5       | 6   | 7,167   | 5        |
| 3       | 103 | -2,666  | 8        |

## Zestaw 74

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 6   | -1,225  | 7        |
| 1       | 3   | 10,046  | 3        |
| 3       | 7   | 0,760   | 6        |
| 4       | 6   | 3,454   | 8        |
| 7       | 101 | 3,327   | 7        |
| 1       | 102 | 2,555   | 7        |
| 2       | 4   | -4,682  | 6        |
| 1       | 7   | 10,804  | 8        |
| 5       | 103 | -1,162  | 8        |
| 4       | 7   | -1,444  | 4        |
| 1       | 5   | 8,544   | 8        |
| 3       | 5   | -1,512  | 3        |
| 3       | 6   | 5,657   | 7        |
| 5       | 6   | 7,158   | 6        |

## Zestaw 75

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 6   | 15,703  | 3        |
| 4       | 6   | 3,460   | 3        |
| 1       | 101 | 14,127  | 8        |
| 6       | 103 | -8,324  | 4        |
| 3       | 6   | 5,646   | 4        |
| 2       | 5   | -8,376  | 6        |
| 5       | 7   | 2,262   | 3        |
| 1       | 7   | 10,805  | 4        |
| 4       | 102 | -9,690  | 7        |
| 4       | 5   | -3,701  | 8        |
| 5       | 6   | 7,162   | 3        |
| 4       | 7   | -1,433  | 4        |
| 1       | 3   | 10,055  | 7        |
| 2       | 3   | -6,872  | 7        |

## Zestaw 76

|   |     | $h$ [m] | $m$ [mm] |
|---|-----|---------|----------|
| 6 | 103 | -8,318  | 7        |
| 5 | 7   | 2,270   | 7        |
| 5 | 101 | 5,592   | 3        |
| 1 | 102 | 2,554   | 7        |
| 2 | 4   | -4,683  | 5        |
| 2 | 6   | -1,224  | 4        |
| 2 | 5   | -8,383  | 3        |
| 5 | 6   | 7,156   | 3        |
| 3 | 4   | 2,188   | 6        |
| 1 | 3   | 10,053  | 5        |
| 1 | 7   | 10,803  | 6        |
| 1 | 6   | 15,708  | 7        |
| 3 | 7   | 0,750   | 8        |
| 1 | 5   | 8,546   | 3        |

## Zestaw 77

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 3       | 6   | 5,651   | 4        |
| 1       | 5   | 8,544   | 6        |
| 1       | 2   | 16,921  | 5        |
| 1       | 6   | 15,709  | 8        |
| 3       | 101 | 4,084   | 3        |
| 2       | 7   | -6,110  | 5        |
| 2       | 6   | -1,220  | 8        |
| 1       | 3   | 10,049  | 5        |
| 4       | 7   | -1,437  | 5        |
| 4       | 6   | 3,457   | 7        |
| 1       | 102 | 2,560   | 3        |
| 3       | 4   | 2,191   | 5        |
| 2       | 103 | -9,539  | 7        |
| 4       | 5   | -3,709  | 5        |

## Zestaw 78

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 7   | -6,110  | 4        |
| 4       | 6   | 3,453   | 7        |
| 1       | 6   | 15,704  | 3        |
| 2       | 5   | -8,385  | 3        |
| 2       | 3   | -6,870  | 4        |
| 1       | 5   | 8,541   | 6        |
| 3       | 102 | -7,489  | 5        |
| 7       | 101 | 3,325   | 3        |
| 1       | 4   | 12,244  | 8        |
| 1       | 7   | 10,810  | 3        |
| 2       | 6   | -1,221  | 5        |
| 4       | 7   | -1,443  | 5        |
| 3       | 6   | 5,654   | 5        |
| 6       | 103 | -8,324  | 8        |

## Zestaw 79

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 3   | -6,872  | 7        |
| 1       | 5   | 8,537   | 6        |
| 4       | 7   | -1,439  | 7        |
| 5       | 6   | 7,158   | 3        |
| 4       | 103 | -4,858  | 4        |
| 1       | 3   | 10,046  | 3        |
| 3       | 4   | 2,199   | 8        |
| 2       | 6   | -1,221  | 4        |
| 7       | 101 | 3,325   | 3        |
| 3       | 102 | -7,500  | 3        |
| 2       | 4   | -4,681  | 6        |
| 1       | 4   | 12,241  | 3        |
| 3       | 6   | 5,654   | 8        |
| 5       | 7   | 2,260   | 7        |



## Zestaw 80

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 2   | 16,922  | 4        |
| 3       | 5   | -1,505  | 5        |
| 3       | 4   | 2,188   | 8        |
| 5       | 6   | 7,165   | 3        |
| 4       | 7   | -1,439  | 8        |
| 3       | 7   | 0,755   | 3        |
| 6       | 101 | -1,577  | 4        |
| 2       | 4   | -4,674  | 8        |
| 1       | 4   | 12,243  | 3        |
| 5       | 7   | 2,270   | 4        |
| 2       | 102 | -14,365 | 7        |
| 2       | 6   | -1,217  | 5        |
| 2       | 5   | -8,379  | 5        |
| 1       | 103 | 7,389   | 3        |

## Zestaw 81

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 3       | 7   | 0,761   | 6        |
| 5       | 102 | -5,986  | 6        |
| 6       | 103 | -8,319  | 3        |
| 1       | 4   | 12,240  | 4        |
| 1       | 101 | 14,128  | 7        |
| 5       | 6   | 7,165   | 4        |
| 3       | 6   | 5,652   | 7        |
| 2       | 7   | -6,117  | 3        |
| 2       | 5   | -8,382  | 3        |
| 1       | 6   | 15,707  | 6        |
| 1       | 7   | 10,812  | 5        |
| 2       | 3   | -6,868  | 4        |
| 3       | 4   | 2,198   | 4        |
| 4       | 7   | -1,439  | 7        |

## Zestaw 82

|   |     | $h$ [m] | $m$ [mm] |
|---|-----|---------|----------|
| 5 | 102 | -5,986  | 5        |
| 1 | 4   | 12,246  | 6        |
| 2 | 101 | -2,798  | 5        |
| 5 | 6   | 7,162   | 5        |
| 4 | 5   | -3,702  | 6        |
| 3 | 7   | 0,760   | 4        |
| 2 | 6   | -1,218  | 7        |
| 4 | 103 | -4,857  | 3        |
| 2 | 4   | -4,682  | 7        |
| 1 | 7   | 10,806  | 7        |
| 3 | 5   | -1,509  | 3        |
| 1 | 2   | 16,917  | 8        |
| 3 | 6   | 5,648   | 4        |
| 1 | 6   | 15,698  | 7        |

## Zestaw 83

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 3   | -6,873  | 7        |
| 2       | 5   | -8,382  | 6        |
| 5       | 7   | 2,259   | 4        |
| 4       | 6   | 3,463   | 4        |
| 1       | 7   | 10,804  | 8        |
| 2       | 7   | -6,119  | 7        |
| 2       | 4   | -4,673  | 5        |
| 5       | 6   | 7,162   | 6        |
| 1       | 6   | 15,708  | 5        |
| 5       | 101 | 5,590   | 3        |
| 3       | 103 | -2,672  | 3        |
| 1       | 3   | 10,047  | 5        |
| 4       | 7   | -1,438  | 5        |
| 7       | 102 | -8,247  | 5        |

## Zestaw 84

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 2       | 4   | -4,681  | 6        |
| 2       | 3   | -6,872  | 7        |
| 4       | 103 | -4,858  | 4        |
| 1       | 5   | 8,537   | 6        |
| 3       | 6   | 5,654   | 8        |
| 5       | 6   | 7,158   | 3        |
| 1       | 4   | 12,241  | 3        |
| 4       | 7   | -1,439  | 7        |
| 3       | 102 | -7,500  | 3        |
| 7       | 101 | 3,325   | 3        |
| 3       | 4   | 2,199   | 8        |
| 5       | 7   | 2,260   | 7        |
| 1       | 3   | 10,046  | 3        |
| 2       | 6   | -1,221  | 4        |

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## Zestaw 85

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 5       | 103 | -1,155  | 7        |
| 1       | 2   | 16,926  | 8        |
| 2       | 5   | -8,380  | 8        |
| 3       | 4   | 2,198   | 7        |
| 1       | 3   | 10,057  | 6        |
| 4       | 6   | 3,457   | 6        |
| 4       | 7   | -1,441  | 4        |
| 5       | 6   | 7,159   | 3        |
| 6       | 102 | -13,145 | 8        |
| 3       | 6   | 5,655   | 3        |
| 1       | 4   | 12,242  | 4        |
| 2       | 3   | -6,871  | 3        |
| 1       | 101 | 14,125  | 6        |
| 5       | 7   | 2,261   | 8        |

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## Zestaw 86

|   |     | $h$ [m] | $m$ [mm] |
|---|-----|---------|----------|
| 3 | 101 | 4,079   | 6        |
| 7 | 102 | -8,254  | 3        |
| 1 | 3   | 10,049  | 8        |
| 2 | 103 | -9,544  | 4        |
| 4 | 5   | -3,707  | 5        |
| 2 | 6   | -1,224  | 4        |
| 1 | 6   | 15,707  | 6        |
| 4 | 7   | -1,433  | 3        |
| 3 | 7   | 0,751   | 5        |
| 2 | 5   | -8,380  | 5        |
| 1 | 2   | 16,922  | 8        |
| 3 | 6   | 5,650   | 8        |
| 1 | 5   | 8,546   | 6        |
| 2 | 7   | -6,118  | 6        |

## Zestaw 87

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 5       | 7   | 2,270   | 7        |
| 2       | 4   | -4,683  | 5        |
| 3       | 7   | 0,750   | 8        |
| 2       | 6   | -1,224  | 4        |
| 1       | 6   | 15,708  | 7        |
| 6       | 103 | -8,318  | 7        |
| 1       | 7   | 10,803  | 6        |
| 1       | 3   | 10,053  | 5        |
| 3       | 4   | 2,188   | 6        |
| 1       | 102 | 2,554   | 7        |
| 2       | 5   | -8,383  | 3        |
| 5       | 6   | 7,156   | 3        |
| 1       | 5   | 8,546   | 3        |
| 5       | 101 | 5,592   | 3        |



## Zestaw 88

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 2       | 7       | -6,118   | 4 |
| 5       | 7       | 2,263    | 7 |
| 4       | 102     | -9,685   | 5 |
| 2       | 5       | -8,378   | 4 |
| 4       | 7       | -1,436   | 4 |
| 6       | 103     | -8,324   | 8 |
| 2       | 101     | -2,792   | 5 |
| 1       | 7       | 10,807   | 3 |
| 3       | 6       | 5,653    | 8 |
| 1       | 5       | 8,544    | 5 |
| 3       | 4       | 2,190    | 7 |
| 1       | 6       | 15,704   | 7 |
| 1       | 2       | 16,925   | 8 |
| 5       | 6       | 7,162    | 8 |

## Zestaw 89

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 4       | 6       | 3,453    | 8 |
| 2       | 5       | -8,385   | 7 |
| 5       | 102     | -5,989   | 3 |
| 1       | 6       | 15,702   | 5 |
| 2       | 103     | -9,534   | 6 |
| 3       | 7       | 0,759    | 7 |
| 3       | 101     | 4,081    | 7 |
| 1       | 3       | 10,046   | 4 |
| 1       | 5       | 8,542    | 5 |
| 2       | 4       | -4,682   | 7 |
| 2       | 3       | -6,872   | 3 |
| 3       | 6       | 5,656    | 8 |
| 5       | 6       | 7,162    | 7 |
| 2       | 7       | -6,119   | 4 |

## Zestaw 90

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 6       | 101 | -1,573  | 3        |
| 1       | 3   | 10,055  | 7        |
| 7       | 102 | -8,252  | 7        |
| 3       | 4   | 2,199   | 7        |
| 5       | 6   | 7,162   | 6        |
| 2       | 5   | -8,377  | 6        |
| 2       | 6   | -1,225  | 4        |
| 3       | 7   | 0,752   | 5        |
| 1       | 6   | 15,707  | 5        |
| 3       | 103 | -2,670  | 4        |
| 5       | 7   | 2,261   | 6        |
| 1       | 4   | 12,251  | 6        |
| 3       | 6   | 5,654   | 3        |
| 1       | 2   | 16,919  | 7        |

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## Zestaw 91

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 3       | 6   | 5,656   | 8        |
| 1       | 5   | 8,542   | 5        |
| 5       | 6   | 7,162   | 7        |
| 1       | 3   | 10,046  | 4        |
| 3       | 101 | 4,081   | 7        |
| 2       | 5   | -8,385  | 7        |
| 3       | 7   | 0,759   | 7        |
| 2       | 7   | -6,119  | 4        |
| 2       | 103 | -9,534  | 6        |
| 5       | 102 | -5,989  | 3        |
| 1       | 6   | 15,702  | 5        |
| 2       | 3   | -6,872  | 3        |
| 4       | 6   | 3,453   | 8        |
| 2       | 4   | -4,682  | 7        |

## Zestaw 92

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 3       | 103 | -2,674  | 3        |
| 6       | 102 | -13,150 | 7        |
| 1       | 4   | 12,245  | 6        |
| 2       | 6   | -1,225  | 3        |
| 5       | 6   | 7,162   | 5        |
| 2       | 7   | -6,111  | 7        |
| 5       | 7   | 2,263   | 7        |
| 4       | 7   | -1,441  | 7        |
| 1       | 7   | 10,810  | 5        |
| 1       | 2   | 16,926  | 5        |
| 4       | 6   | 3,457   | 6        |
| 2       | 3   | -6,867  | 8        |
| 3       | 5   | -1,506  | 6        |
| 5       | 101 | 5,585   | 3        |

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## Zestaw 93

| <hr/>   |     |         |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 4       | 7   | -1,434  | 6        |
| 1       | 3   | 10,054  | 7        |
| 3       | 103 | -2,672  | 7        |
| 2       | 5   | -8,385  | 6        |
| 2       | 101 | -2,788  | 6        |
| 1       | 2   | 16,925  | 6        |
| 4       | 6   | 3,453   | 3        |
| 3       | 7   | 0,754   | 8        |
| 2       | 6   | -1,217  | 4        |
| 5       | 102 | -5,991  | 8        |
| 1       | 7   | 10,805  | 7        |
| 3       | 4   | 2,188   | 4        |
| 5       | 7   | 2,268   | 6        |
| 5       | 6   | 7,165   | 8        |
| <hr/>   |     |         |          |

## Zestaw 94

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 1       | 5   | 8,537   | 4        |
| 3       | 5   | -1,508  | 6        |
| 5       | 7   | 2,264   | 4        |
| 5       | 6   | 7,157   | 6        |
| 6       | 102 | -13,150 | 5        |
| 3       | 7   | 0,760   | 5        |
| 2       | 3   | -6,867  | 4        |
| 1       | 7   | 10,809  | 4        |
| 1       | 4   | 12,249  | 5        |
| 4       | 6   | 3,452   | 5        |
| 1       | 3   | 10,057  | 3        |
| 2       | 7   | -6,117  | 4        |
| 2       | 101 | -2,794  | 4        |
| 3       | 103 | -2,669  | 3        |

## Zestaw 95

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 4       | 5   | -3,708  | 3        |
| 1       | 3   | 10,046  | 5        |
| 4       | 102 | -9,690  | 5        |
| 6       | 103 | -8,318  | 5        |
| 2       | 7   | -6,115  | 8        |
| 3       | 4   | 2,195   | 5        |
| 3       | 6   | 5,656   | 5        |
| 1       | 7   | 10,812  | 4        |
| 2       | 5   | -8,383  | 7        |
| 2       | 4   | -4,683  | 7        |
| 5       | 101 | 5,593   | 8        |
| 1       | 2   | 16,926  | 4        |
| 4       | 6   | 3,462   | 3        |
| 3       | 7   | 0,753   | 7        |



## Zestaw 96

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 4       | 6   | 3,460   | 6        |
| 4       | 5   | -3,707  | 4        |
| 3       | 7   | 0,759   | 6        |
| 4       | 7   | -1,444  | 8        |
| 2       | 5   | -8,375  | 8        |
| 2       | 6   | -1,223  | 5        |
| 2       | 4   | -4,680  | 4        |
| 1       | 2   | 16,917  | 5        |
| 4       | 101 | 1,879   | 4        |
| 6       | 103 | -8,318  | 6        |
| 5       | 6   | 7,161   | 6        |
| 1       | 6   | 15,707  | 5        |
| 1       | 3   | 10,048  | 4        |
| 2       | 102 | -14,366 | 6        |

## Zestaw 97

| odcinek |     | $h$ [m] | $m$ [mm] |
|---------|-----|---------|----------|
| 2       | 5   | -8,380  | 8        |
| 3       | 6   | 5,655   | 3        |
| 5       | 103 | -1,155  | 7        |
| 1       | 3   | 10,057  | 6        |
| 2       | 3   | -6,871  | 3        |
| 5       | 6   | 7,159   | 3        |
| 6       | 102 | -13,145 | 8        |
| 3       | 4   | 2,198   | 7        |
| 1       | 2   | 16,926  | 8        |
| 1       | 101 | 14,125  | 6        |
| 1       | 4   | 12,242  | 4        |
| 5       | 7   | 2,261   | 8        |
| 4       | 7   | -1,441  | 4        |
| 4       | 6   | 3,457   | 6        |

## Zestaw 98

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 2       | 5       | -8,378   | 4 |
| 5       | 7       | 2,263    | 7 |
| 3       | 6       | 5,653    | 8 |
| 5       | 6       | 7,162    | 8 |
| 2       | 101     | -2,792   | 5 |
| 1       | 7       | 10,807   | 3 |
| 3       | 4       | 2,190    | 7 |
| 4       | 7       | -1,436   | 4 |
| 4       | 102     | -9,685   | 5 |
| 2       | 7       | -6,118   | 4 |
| 1       | 2       | 16,925   | 8 |
| 1       | 5       | 8,544    | 5 |
| 6       | 103     | -8,324   | 8 |
| 1       | 6       | 15,704   | 7 |

## Zestaw 99

|         |     | <hr/>   |          |
|---------|-----|---------|----------|
| odcinek |     | $h$ [m] | $m$ [mm] |
| <hr/>   |     |         |          |
| 5       | 101 | 5,584   | 5        |
| 1       | 3   | 10,048  | 7        |
| 3       | 5   | -1,508  | 7        |
| 2       | 7   | -6,110  | 3        |
| 4       | 7   | -1,436  | 7        |
| 3       | 4   | 2,196   | 3        |
| 4       | 6   | 3,461   | 3        |
| 2       | 5   | -8,381  | 5        |
| 1       | 6   | 15,700  | 8        |
| 1       | 103 | 7,387   | 7        |
| 5       | 7   | 2,270   | 4        |
| 3       | 7   | 0,752   | 3        |
| 4       | 102 | -9,692  | 5        |
| 2       | 6   | -1,225  | 7        |

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## Zestaw 100

| odcinek | $h$ [m] | $m$ [mm] |   |
|---------|---------|----------|---|
| 3       | 5       | -1,509   | 3 |
| 1       | 4       | 12,246   | 6 |
| 2       | 4       | -4,682   | 7 |
| 1       | 6       | 15,698   | 7 |
| 2       | 6       | -1,218   | 7 |
| 3       | 6       | 5,648    | 4 |
| 4       | 5       | -3,702   | 6 |
| 1       | 7       | 10,806   | 7 |
| 5       | 102     | -5,986   | 5 |
| 5       | 6       | 7,162    | 5 |
| 4       | 103     | -4,857   | 3 |
| 1       | 2       | 16,917   | 8 |
| 3       | 7       | 0,760    | 4 |
| 2       | 101     | -2,798   | 5 |