



Opleiding: Middenkaderfunctionaris Bouw en Infra

Leerweg: BOL Niveau 4

## Wiskunde 1-1

Periode 01

Opdrachten Week 02

# Getallen – Rekenen

## Uitweking

Te behalen cijfers = NVT

Naam: \_\_\_\_\_

Klas: \_\_\_\_\_

Datum: \_\_\_\_\_

### Opgave 15:

Bereken:

- a  $160,34 - 25,9$
- b  $25,9 - 160,34$
- c  $105,3 + -314,2$
- d  $-105,3 - -314,2$

### Oplossing:

a  $160,34 - 25,9$

$$\begin{array}{r} 160,34 \\ - 25,90 \\ \hline 134,44 \end{array}$$

Handwritten annotations: red arrows from 5 to 10, 10 to 13, and 13 to 18.

b  $25,9 - 160,34$

$$\begin{array}{r} 25,90 \\ - 160,34 \\ \hline 134,44 \end{array}$$

Handwritten annotations: red arrows from 5 to 18, 18 to 13, and 13 to 18. A green curved arrow points from the first subtraction to this one.

c  $105,3 + -314,2$

$$= 105,3 (+ \cancel{-}) 314,2$$

$$= 105,3 - 314,2$$

$$\begin{array}{r} - 314,2 \\ + 105,3 \\ \hline - 208,9 \end{array}$$

Handwritten annotations: red arrows from 0 to 13, 13 to 12, and 12 to 12. A green curved arrow points from the addition to this subtraction.

d  $-105,3 - -314,2$

$$= -105,3 (- \cancel{-}) 314,2$$

$$= -105,3 + 314,2$$

$$\begin{array}{r} + 314,2 \\ - 105,3 \\ \hline + 208,9 \end{array}$$

Handwritten annotations: red arrows from 0 to 13, 13 to 12, and 12 to 12. A green curved arrow points from the subtraction to this addition.

**Opgave 16:**

Doe de volgende optellingen en aftrekkingen met de hand.

a  $341 + 1715$

b  $341 - 1715$

c  $22,39 - 7,6$

d  $22,39 - 7,6$

e  $0,123 + 0,049$

f  $-0,123 - 0,049$

**Oplossing:**

a  $341 + 1715$

$$\begin{array}{r}
 +1715 \\
 +341 \\
 \hline
 2056
 \end{array}$$

c  $22,39 - 7,6$

$$\begin{array}{r}
 +22,39 \\
 -7,60 \\
 \hline
 14,79
 \end{array}$$

e  $0,123 + 0,049$

$$\begin{array}{r}
 +0,123 \\
 +0,049 \\
 \hline
 0,172
 \end{array}$$

b  $341 - 1715$

$$\begin{array}{r}
 6\cancel{1} \\
 -1715 \\
 +341 \\
 \hline
 -1374
 \end{array}$$

d  $22,39 - 7,6$

$$\begin{array}{r}
 = 22,39 (\cancel{-} \times) 7,6 \\
 = 22,39 + 7,6 \\
 +22,39 \\
 +7,60 \\
 \hline
 29,99
 \end{array}$$

f  $-0,123 - 0,049$

$$\begin{array}{r}
 -0,123 \\
 -0,049 \\
 \hline
 -0,172
 \end{array}$$

**Opgave 17:**

Je kunt  $1264 - 913$  ook uitrekenen door 913 aan te vullen tot 1264:

$$913 + 7 + 80 + 264 = 1264, \text{ dus } 1264 - 913 = 7 + 80 + 264 = 351.$$

Bereken op deze manier:

a  $2573 - 2412$

b  $6,72 - 5,38$

**Oplossing:**

a  $2412 + 8 + 80 + 73 = 2573, \text{ dus } 2573 - 2412 = 161.$

b  $5,38 + 0,02 + 0,60 + 0,72 = 6,72, \text{ dus } 6,72 - 5,38 = 1,34.$

**Opgave 18:**

Doe de volgende optellingen en aftrekkingen met de hand.

a  $1645 - 797 - 418$

b  $1645 + 797 - 418$

c  $1645 - 797 + 418$

d  $1645 + 797 + 418$

**Oplossing:**

a  $\begin{array}{r} 1645 \\ \underline{- 797} \\ \underline{- 418} \end{array} \quad \begin{array}{l} ① \\ + \end{array}$

$$\begin{array}{r} - 797 \\ - 418 \\ \hline - 1215 \end{array}$$

$$\begin{array}{r} + 1645 \\ - 1215 \\ \hline + 430 \end{array}$$

b  $\begin{array}{r} 1645 \\ \underline{+ 797} \\ \underline{- 418} \end{array} \quad \begin{array}{l} ① \\ ② \\ + \end{array}$

$$\begin{array}{r} + 1645 \\ + 797 \\ \hline 2442 \end{array}$$
  
$$\begin{array}{r} + 2442 \\ - 418 \\ \hline + 2024 \end{array}$$

c  $1645 - 797 + 418$

d  $1645 + 797 + 418$

$$\begin{array}{r} + 1645 \\ + 418 \\ \hline + 2063 \end{array}$$

$$2063 - 797$$

$$\begin{array}{r} + 2063 \\ - 797 \\ \hline + 1266 \end{array}$$

$$\begin{array}{r} + 1645 \\ + 797 \\ + 418 \\ \hline + 2860 \end{array}$$

### Opgave 19:

Doe de volgende vermenigvuldigingen en delingen met de hand. ontroleer je antwoord met de rekenmachine.

a  $1734 \times 51$

b  $1734 / 51$

c  $23,56 \times 3,1$

d  $23,56 / 3,1$

e  $1,23 \times -0,05$

f  $1,23 / -0,05$

a 88434

b 34

c 73,036

d 7,6

e -0,0615

f -24,6

### Oplossing:

a  $1734 \times 51$

$$\begin{array}{r} 1734 \\ \times 51 \\ \hline 1734 \\ 86700 \\ \hline 88434 \end{array}$$

c  $23,56 \times 3,1 = 73,036$

$$\begin{array}{r} 2356 \\ \times 31 \\ \hline 2356 \\ 70680 \\ \hline 73,036 \end{array}$$

e  $1,23 \times -0,05$

$$\begin{array}{r} 123 \\ \times 5 \\ \hline 615 \end{array}$$

$$\Rightarrow \begin{array}{r} 615,0 \\ -0,0615 \\ \hline \end{array}$$

b  $1734 / 51$

$$\begin{array}{r} 51 / 1734 \backslash 34 \\ \underline{-153} \\ 204 \\ \underline{204} \\ 000 \\ \Rightarrow 1734 / 51 = 34 \end{array}$$

d  $23,56 / 3,1 \times 100$   
 $= 2356 / 310$

$$\Rightarrow 23,56 / 3,1 = 7,6$$

$$\begin{array}{r} 310 / 2356 \backslash 7,6 \\ \underline{-2170} \\ 1860 \\ \underline{1860} \\ \times \end{array}$$

f  $1,23 / -0,05 \times 100$

$$= 123 / -5$$

$$\begin{array}{r} 5 / 123 \backslash 24,6 \\ \underline{-10} \\ 23 \\ \underline{20} \\ 30 \\ \underline{30} \\ 0 \end{array}$$

$$\boxed{24,6}$$

**Opgave 20:**

Bereken met de hand en controleer je antwoord achteraf met de rekenmachine.

- a  $1645 \times -97/25$   
 b  $1645/-35 \times -418$   
 c  $112,6 \times 52/2,6$   
 d  $150/1,25/-32$

- a -6382,6  
 b 19646  
 c 2252  
 d -3,75

**Oplossing:**

a  $1645 \times -97/25$   
 $\overbrace{\quad\quad\quad}^{\textcircled{1}}$   
 $\overbrace{\quad\quad\quad}^{\textcircled{2}}$

$$\begin{array}{r}
 1645 \\
 -97 \\
 \hline
 11515 \\
 148050 \\
 \hline
 -159565
 \end{array}
 \quad
 \begin{array}{r}
 \textcircled{1} \\
 -159565 \\
 \hline
 \end{array}$$

$$-159565/25$$

$$25 \overline{)159565} \quad | 6382,6$$

$$\begin{array}{r}
 150 \\
 \hline
 95 \\
 -75 \\
 \hline
 206 \\
 -200 \\
 \hline
 65 \\
 -50 \\
 \hline
 150 \\
 \hline
 150
 \end{array}$$

$$\begin{array}{r}
 \textcircled{2} \\
 \hline
 6382,6 \quad | \quad 0
 \end{array}$$

b  $1645/-35 \times -418$   
 $\overbrace{\quad\quad\quad}^{\textcircled{1}}$   
 $\overbrace{\quad\quad\quad}^{\textcircled{2}}$

$$\begin{array}{r}
 35 \overline{)1645} \quad | 47 \\
 -140 \\
 \hline
 245 \\
 245 \\
 \hline
 0 \\
 = -47
 \end{array}$$

$$-47 \times -418$$

$$\begin{array}{r}
 -418 \\
 -47 \\
 \hline
 2926
 \end{array}$$

$$\begin{array}{r}
 16720 \\
 + \\
 +19646
 \end{array}$$

$$-x- = +$$

$$\boxed{19646}$$

2

$$c \quad \begin{array}{r} 112,6 \times 52 / 2,6 \\ \hline (1) \\ (2) \end{array}$$

$$\begin{array}{r} 112,6 \\ 52 \\ \hline 2252 \\ 56300 \\ \hline 5855,2 \end{array}$$

$$5855,2 / 2,6 \quad \times 10$$

$$58552 / 26$$

$$26 / 58552 \quad | \quad 2252$$

$$\begin{array}{r} 52 \\ \hline 65 \\ 52 \\ \hline 135 \\ 130 \\ \hline 52 \\ 52 \\ \hline 0 \end{array}$$

$$(2) \quad \boxed{2252}$$

$$d \quad \begin{array}{r} 150 / 1,25 / -32 \\ \hline (1) \\ (2) \end{array}$$

$$150 / 1,25 \quad \times 100$$

$$1500 / 125$$

$$125 / 1500 \quad | \quad 12$$

$$\begin{array}{r} 125 \\ 125 \\ \hline 50 \\ 50 \\ \hline 0 \end{array}$$

$$(1) \quad \boxed{12}$$

$$12 / -32$$

$$32 / 120 \quad | \quad 0,375$$

$$\begin{array}{r} 96 \\ \hline 240 \\ 224 \\ \hline 160 \\ 160 \\ \hline 0 \end{array}$$

$$(2) \quad \boxed{-0,375}$$