

DEIN NAME

DATUM

KLASSE

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DEINE PERFORMANCE

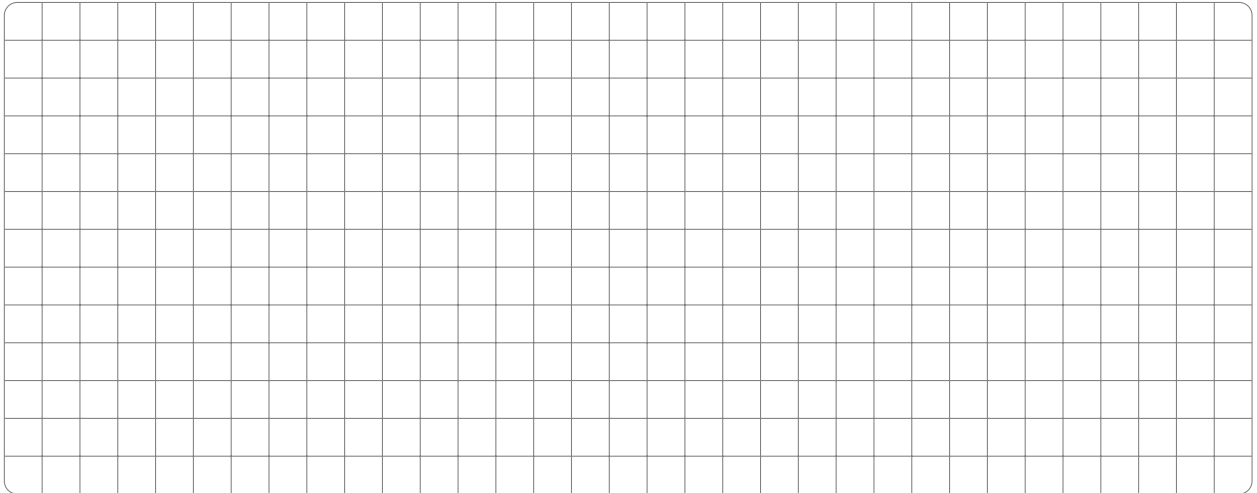


Lineare Gleichungen

Löse die linearen Gleichungen

1)

$$42x - 18 = 66$$



2)

$$3x - 20 = 10$$



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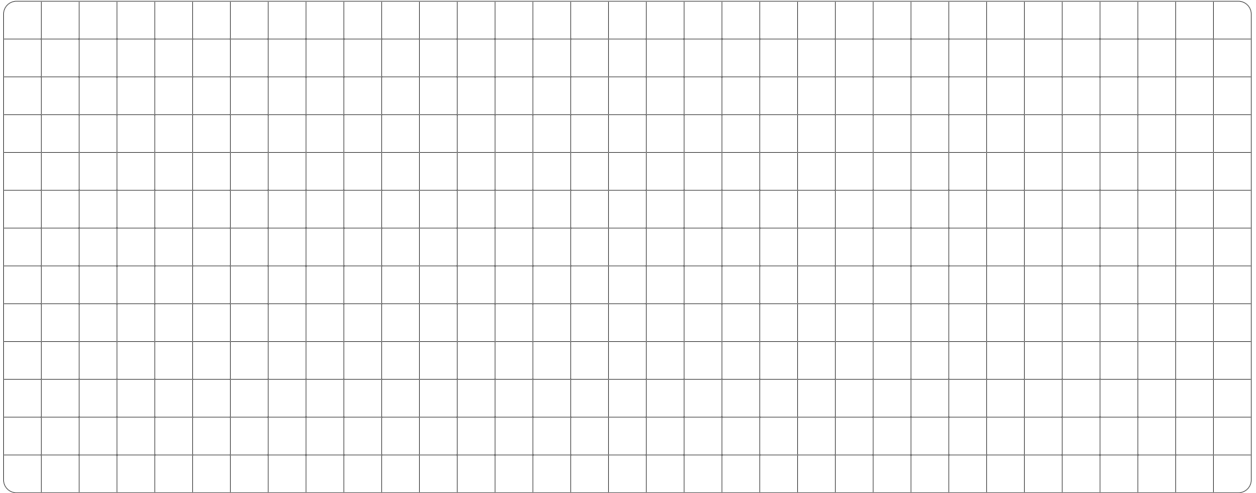
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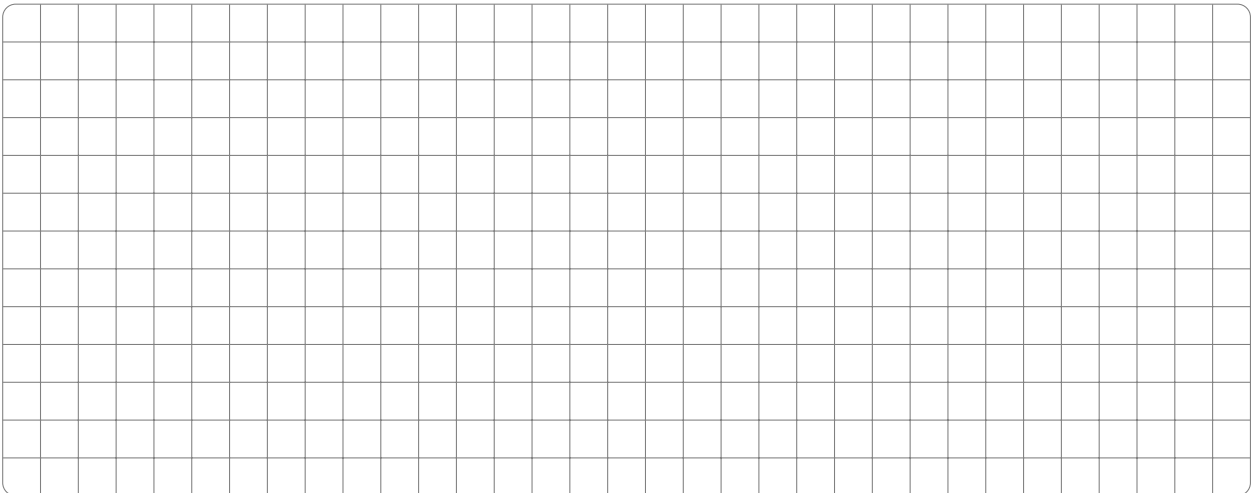
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3) $-0,5x + 22 = -14$



4) $-66x + 12 = -32$



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7) $0,5x - 0,135 + 0,23 = -0,155$

A large rectangular grid with 20 columns and 20 rows, intended for students to show their work for solving the equation above.

8) $-0,2x + 172 = 173,5$

A large rectangular grid with 20 columns and 20 rows, intended for students to show their work for solving the equation above.



Lösungsdefinitionen

Teilaufgabe 1)

$$\begin{array}{rcl} 42x - 18 & = & 66 & | + 18 \\ 42x & = & 84 & | : 42 \\ x & = & 2 & \end{array}$$

Teilaufgabe 2)

$$\begin{array}{rcl} 3x - 20 & = & 10 & | + 20 \\ 3x & = & 30 & | : 3 \\ x & = & 10 & \end{array}$$

Teilaufgabe 3)

$$\begin{array}{rcl} -0,5x + 22 & = & -14 & | - 22 \\ -0,5x & = & -36 & | : (-0,5) \\ x & = & 72 & \end{array}$$

Teilaufgabe 4)

$$\begin{array}{rcl} -66x + 12 & = & -32 & | - 12 \\ -66x & = & -44 & | : (-66) \\ x & = & \frac{2}{3} = 0,\overline{666} & \end{array}$$

Teilaufgabe 5)

$$\begin{array}{rcl} 0,25x - 173 & = & -174 & | + 173 \\ 0,25x & = & -1 & | : 0,25 \\ x & = & -4 & \end{array}$$

MUSTERLÖSUNG



Teilaufgabe 6)

$$\begin{array}{rcl} -1,6x - 0,7 + 19,8 & = & 18,3 \\ -1,6x & = & -0,8 \\ x & = & 0,5 \end{array} \quad \begin{array}{l} | + 0,7 - 19,8 \\ | : (-1,6) \end{array}$$

Teilaufgabe 7)

$$\begin{array}{rcl} 0,5x - 0,135 + 0,23 & = & -0,155 \\ 0,5x & = & -0,25 \\ x & = & -0,5 \end{array} \quad \begin{array}{l} | + 0,135 - 0,23 \\ | : 0,5 \end{array}$$

Teilaufgabe 8)

$$\begin{array}{rcl} -0,2x + 172 & = & 173,5 \\ -0,2x & = & 1,5 \\ x & = & -7,5 \end{array} \quad \begin{array}{l} | - 172 \\ | : (-0,2) \end{array}$$

Teilaufgabe 9)

$$\begin{array}{rcl} 17,5x - 22,3 + 18,2 & = & -4,1 \\ 17,5x & = & 0 \\ x & = & 0 \end{array} \quad \begin{array}{l} | + 22,3 - 18,2 \\ | : 17,5 \end{array}$$

Teilaufgabe 10)

$$\begin{array}{rcl} -1,5x + 1,35 & = & 5,1 \\ -1,5x & = & 3,75 \\ x & = & -2,5 \end{array} \quad \begin{array}{l} | - 1,35 \\ | : (-1,5) \end{array}$$