Terme berechnen

Berechne die fehlenden Zahlen.

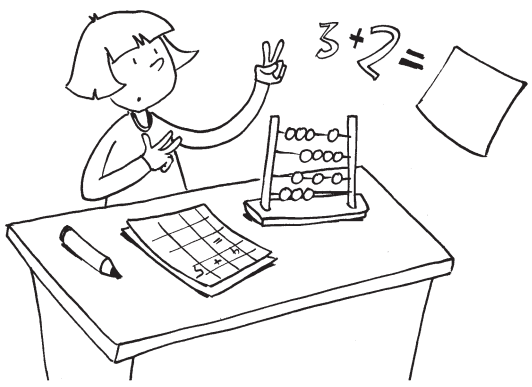
① 17 5 – 4 :

② 6 8 · 12 8 + –

③ 35 18 – 3 5 · –

④ 4 11 · 46 22 – – 5 :

⑤ 7 4 · 15 + 6 5 · –



Fehlerhafte Gleichungen

Hier hat der Fehlerteufel zugeschlagen. Suche den Fehler und verbessere.

① $16 + x = 51 \mid + 16$

$x = 67$

② $2x - 10 = 50 \mid + 10$

$2x = 60 \mid \cdot 2$

$x = 120$

③ $2 + x + 21 = 34 + 3$

$23 + x = 31 \mid - 23$

$x = 8$

④ $18 - 5 + 3x + 3 = 28$

$10 + 3x = 28 \mid - 10$

$3x = 18 \mid : 3$

$x = 6$

⑤ $2x + 28 - 3 + 3x = 50$

$5x + 25 = 50 \mid + 25$

$5x = 75 \mid : 5$

$x = 15$

⑥ $x + 12{,}3 - 8{,}1 = 21$

$x + 20{,}4 = 21 \mid - 20{,}4$

$x = 0{,}6$

Gleichungen lösen

Welche Zahl verbirgt sich hinter x?

① $4x + 6 - 5 + 14 = 35$

② $1x + 9 - 6 + 6x + 6 - 1x = 33$

③ $5 - 2x + 4x - 2 + 8 = 27$

④ $12 - 8x + 24 + 13x - 16 = 65$

⑤ $18 + 5x - 4x - 12 + 3x = 15 + 87 - 60$

⑥ $12x - 3 = 11 \cdot 3$

⑦ $26 - 4x + 6 \cdot 2 + 8x = 5 \cdot 2 \cdot 7$

⑧ $15 : 3 + 6 + 14x - 9x = 6 \cdot 7 - 1$

Terme ordnen und zusammenfassen

Löse die Aufgaben.

① 32a + 40b – 2 • 14a + 3 • 5b – 4 • 12b =

② 96b – 12b – 46a – 33b – 7a • 4 + 4a =

③ 99c : 11 – 37a + 7 • 9c + 46a – 2a + 6c – b =

④ 3 • (x – 3y) + 4x + 7y =

⑤ 34y – (6 • y • 4) + (9x – x + 4) – y + 152 : 19 =

⑥ (6y – 8x) + (14x + 3y) – 4x + 68 : 17 =

⑦ 18x + 15 • (7 – x) + 12y + (8 + 3x) • 2 =

⑧ 8 • 4z – 102x : 17 + 4 • 7 + 30x – 12z =

⑨ (8 – 4 • 12b) • 2 + 18 + 48b + 13a – 12a =

⑩ 15 • 2q – 4 • 9p – 11o + (7 • 6o – 1o) + 50p – 2 • 5q + 10 =

⑪ 1,5 • (8 – 6x) + 5 • 6y + 4 • 0,5x – 30y + 3x + 15 =

⑫ (2,346 + 2,654) • 16a + 8 : 0,5b – 20a • 2 + 16b =

Terme berechnen

Berechne die fehlenden Zahlen.

① 17 – 5 = 12 : 4 = 3

② 6 · 8 = 48 – 12 + 8 = 20 → 48 – 20 = 28

③ 35 – 18 = 17 – 2 = 15 : 3 = 5

④ 4 · 11 = 44 – 46 + 22 = 24 → 44 – 24 = 20 : 5 = 4

⑤ 7 · 4 = 28 + 15 = 43 – 6 · 5 = 30 → 43 – 30 = 13

Terme ordnen und zusammenfassen

Löse die Aufgaben.

① 6a + 3b – a + 7b =

6a – a + 3b + 7b = 5a + 10b

② 20x + 15y – 12x – 8y + 2 =

20x – 12x + 15y – 8y + 2 = 8x + 7y + 2

③ 17p – 12q + 15q – 12p =

17p – 12p – 12q + 15q = 5p + 3q

④ 4x – 10y + 5z + 18y + 14x + 13y =

4x + 14x – 10y + 18y + 13y + 5z = 18x + 21y + 5z

⑤ 9a – 10b + 25b – 4a + 7c =

9a – 4a – 10b + 25b + 7c = 5a + 15b + 7c

⑥ 8m – 4n + 2o – 8m + 6n + 2o =

8m – 8m – 4n + 6n + 2o + 2o = 2n + 4o

⑦ 4a – 3b + 6c + 8b + 7a =

4a + 7a – 3b + 8b + 6c = 11a + 5b + 6c

⑧ 22d + 4e – 12d + 8f + 13e – 5f =

22d – 12d + 4e + 13e + 8f – 5f = 10d + 17e + 3f

⑨ 26n + 14m – 19n + 13 – 6 – 4m =

26n – 19n + 14m – 4m + 13 – 6 = 7n + 10m + 7

⑩ 15,5p – 12,5p – 3o + 4 + 6o =

15,5p – 12,5p – 3o + 6o + 4 = 3p + 3o + 4

Lösungen

Terme ordnen und zusammenfassen

Löse die Aufgaben.

① 12a + 3b + 4a + 7b – 2b =

12a + 4a + 3b + 7b – 2b = 16a + 8b

② 16a – 4b + 6c – 10a – 4c + 8b =

16a – 10a + 8b – 4b + 6c – 4c = 6a + 4b + 2c

③ 12b – 16a + 20a – 6b + 14a – 3b =

12b – 6b – 3b + 20a – 16a + 14a = 3b + 18a

④ 9x + 14y + 33 – 11 – 3y + 2x =

9x + 2x + 14y – 3y + 33 – 11 = 11x + 11y + 22

⑤ 48x + 57y – 19x + 3 • 6 – 42y + 2 – 13x =

48x – 19x – 13x + 57y – 42y + 18 + 2 = 16x + 15y + 20

⑥ 144a – 43a + 160 – 74b + 18a + 200b – 47 – 3b =

144a – 43a + 18a + 160 – 47 + 200b – 74b – 3b = 119a + 123b + 113

⑦ 12a + 60c – 14b + 6a – 49c – 3a + 20b =

12a + 6a – 3a + 20b – 14b + 60c – 49c = 15a + 6b + 11c

⑧ 162c – 16c + 62a – 14c + 71b – 19a – 37b – 18b – 100c =

162c – 16c – 14c – 100c + 62a – 19a + 71b – 37b – 18b = 32c + 43a + 16b

⑨ 249a – 16c + 59b – 210a + 46c – 13b – 9c – 8a + 4b =

249a – 210a – 8a + 59b – 13b + 4b + 46c – 16c – 9c = 31a + 50b + 21c

⑩ 99c – 41y – 53c + 16 + 72y + 23x – 4 – 31y =

99c – 53c + 72y – 31y – 41y + 16 – 4 + 23x = 46c + 12 + 23x

Gleichungen lösen

Welche Zahl verbirgt sich hinter x?

① 4 x + 6 – 5 + 14 = 35
4 x + 15 = 35 | – 15
4 x = 20 | : 4
x = 5

② 1 x + 9 – 6 + 6 x + 6 – 1 x = 33
6 x + 9 = 33 | – 9
6 x = 24 | : 6
x = 4

③ 5 – 2 x + 4 x – 2 + 8 = 27
2 x + 11 = 27 | – 11
2 x = 16 | : 2
x = 8

④ 12 – 8 x + 24 + 13 x – 16 = 65
20 + 5 x = 65 | – 20
5 x = 45 | : 5
x = 9

⑤ 18 + 5 x – 4 x – 12 + 3 x = 15 + 87 – 60
6 + 4 x = 42 | – 6
4 x = 36 | : 4
x = 9

⑥ 12 x – 3 = 11 • 3
12 x – 3 = 33 | + 3
12 x = 36 | : 12
x = 3

⑦ 26 – 4 x + 6 • 2 + 8 x = 5 • 2 • 7
38 + 4 x = 70 | – 38
4 x = 32 | : 4
x = 8

⑧ 15 : 3 + 6 + 14 x – 9 x = 6 • 7 – 1
11 + 5 x = 41 | – 11
5 x = 30 | : 5
x = 6