Lineare Gleichungen

1. Bestimme die Lösungsmenge.

   (a) $x + 7 = 10$
   (b) $x + 11 = 11$
   (c) $x + 25 = 11$
   (d) $x + 0,6 = 1,3$
   (e) $x + \frac{2}{3} = \frac{1}{6}$
   (f) $x - 6 = 18$
   (g) $x - 5 = -5$
   (h) $x - 5 = 5$
   (i) $x - \frac{5}{6} = \frac{1}{3}$

2. Bestimme die Lösungsmenge

   (a) $4x = 48$
   (b) $7x = -56$
   (c) $-11x = -88$
   (d) $\frac{1}{7}x = -5$
   (e) $\frac{1}{5}x = \frac{7}{10}$
   (f) $5u = -55$
   (g) $\frac{1}{2}v = \frac{3}{4}$
   (h) $-\frac{7}{9}y = -\frac{14}{3}$
   (i) $\frac{3}{4}x = -\frac{5}{8}$

3. Bestimme die Lösungsmenge

   (a) $3x + 11 = 20$
   (b) $9x - 7 = 11$
   (c) $17 - 2x = 27$
   (d) $5x + 43 = 13$
   (e) $-8x + 30 = 6$
   (f) $\frac{1}{5}x - 5 = -12$
   (g) $5 = 4a - 19$
   (h) $10 - \frac{1}{3}x = 6$
   (i) $72 - 8b = 64$

4. Bestimme die Lösungsmenge

   (a) $2x + 7x = 45$
   (b) $5x - 3x = 18$
   (c) $7x = 4x + 15$
   (d) $9x = 39 - 4x$
   (e) $8x + 3 = 5x + 24$
   (f) $21x + 17 = 2x + 72 + 8x$

5. Bestimme die Lösungsmenge

   (a) $16x + 19 = 5(4 + 3x)$
   (b) $3(17 + 8x) = 70x - 87$
   (c) $15x + 7(8 + 3x) = 15x + 182$
   (d) $7x + (x + 8) \cdot 3 = 4x$
   (e) $4(y - 3) - 2y = 5(3y + 1)$
   (f) $7(2z + 1) + 5z = 3(8z - 3)$
   (g) $4x - 15(x - 1) = 2(6 - 3x)$
   (h) $(4x - 3) \cdot 5 - 6x = -4(5 + 9x)$

Vorgerechnet auf https://www.koonys.de/3738