$49x^2 - 70x + 25$

$3a$

$4x^2 + 12x + 9$

$1\,\mathrm{dm}^3$

180°

Im 2. Quadranten.

$\frac{5}{3}$

-4

$7.02 \cdot 10^7$

$$4x^2 + 4x\sqrt{x+5} + x + 5$$

$$\frac{\sqrt{2}}{2}$$

$$a = b + 4$$

$$a = b - 4$$

$$x + \frac{7}{4} = 2y - 0.25$$

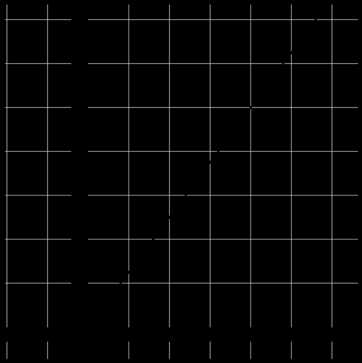
-1

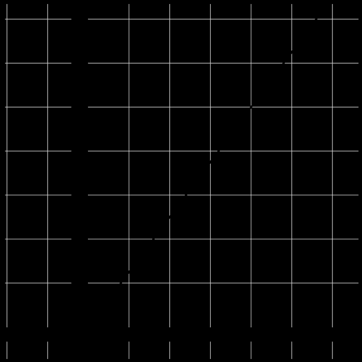
1

$$(-2)^3 = -8, (-2)^{-3} = -\frac{1}{8}, 2^{-3} = \frac{1}{8}, 2^3 = 8$$

$$\frac{-4}{-3} = \frac{4}{3}$$

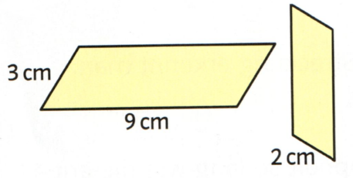
$6 + \frac{3}{2}\pi$



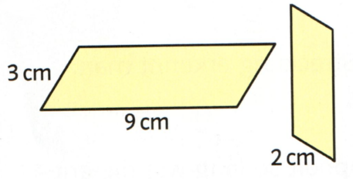


$y = 2.5x$

1. falsch 2. korrekt 3. falsch



3 cm
9 cm
2 cm



6cm

1

Dies ist die y-Achse.

Dies ist die x-Achse.

Viel grösser.

g(t)

$f(t) = 2 + 0.01t$ (in Metern) oder $f(t) = 200 + t$ (in Zentimetern)

$f(2) = 78$

a^3

$$c^2 = a^2 + b^2 \rightarrow a = 3$$

$$\alpha = \beta = 37^\circ \to \gamma = 180^\circ - 2 \cdot 37^\circ = 106^\circ$$

c)

In einem gleichschenkligen

In einem rechtwinkligen

a),d)

$\frac{1}{a}$

a) $A' = (2; -5)$ b) $A'' = (-2; 5)$

$A' = (4; 3)$

Ja, denn sowohl die Seitenlängen ($\sqrt{52}$) als auch die Diagonalen ($\sqrt{104}$) sind gleich lang

$\frac{3}{4}$

$-2 - 5x$

$2a + b - 3c$

$54u^9$

$$a^2 + a + b - b^2$$

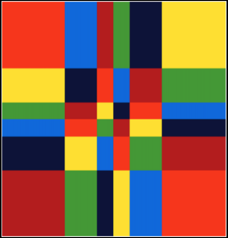
$$a^4 - a^3 - a - 1$$

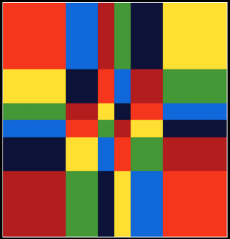
$2x + 5y$

$5ab$

$-a^2$

$c)$





$$2ab + 2ac + b^2 + c^2$$

$$14 \cdot 10^{14} = 1.4 \cdot 10^{15}$$

$$-\frac{1}{21}$$

$2 \cdot 10^6$

$\frac{5}{2}$

$x = 7$

$20\,{}^{\mathrm{m}}\!/\!{}_{\mathrm{s}}$

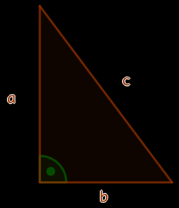
$0.2\,\mathrm{m}^3$

$$f(-3) = -\frac{5}{2}$$

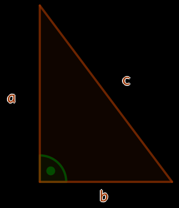
$f(-2) = 4$

$(x-1)^2$

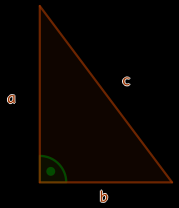
2

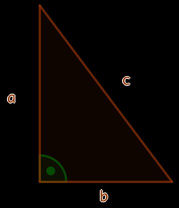


a
b
c



$c = 5\,\mathrm{m}$


a
b
c



$c = 3\,\mathrm{m}$

4π m

$4\pi\ \mathrm{m}^2$

$\frac{16}{25}\pi\ \mathrm{m}^2$

3 m

$a - 4$

$4(a+2)$

-18

$x + y$

$$\frac{8}{5}$$

$$\frac{81}{4}$$

$\frac{4}{3}$

$$\frac{13}{6}$$

0

1

$\frac{37}{30} = 1\frac{7}{30}; \frac{1}{3}$

-44

60°

45°

$\sqrt{2}$

$\sqrt{5}$

2

105°, 120° und 135°

$$\frac{1001}{13} = 77$$

$$x = 22$$

$x = 34$

$$-\frac{7}{30}$$

$$kgV(14,35) = 70,\ ggT(14,35) = 7$$

$$\frac{x-y}{2+z}$$

$$kgV(14,35) = 225,\ \ ggT(14,35) = 15$$

$$\sqrt{\sqrt{81}},\ \tfrac{28}{9},\ \pi,\ \tfrac{16}{5},\ \sqrt{13},\ 2^2$$

$x = 7$

50’000 Liter

160 Liter

Das Grundquadrat hat eine Seitenlänge von 5 cm

$x = 2$

$$\frac{25}{12}$$

223.43 cm

$x = 4$

$$2b + 3a = 5$$

kleiner

$35 - 10a$ und $12 - 2a$

Falsch, das gilt nur für $x < 0$ oder $x > 1$

30 km/h

30 %

$0 < r < 1$

$p = 4\%$

$$\frac{-d(a+b)}{3}$$

$$\frac{45+2\sqrt{15}}{10}$$

$4a^2 + 6ab$ und $12a^2b$

durchschnittliches Sackgeld pro Woche

$3 \cdot (x - 5)$

$$\frac{-10}{9}$$

$\frac{x}{4} - \frac{x}{5} = 4$ ergibt $x = 80$

a) $\frac{13}{4}$ b) 4

$\frac{1}{2}$

$\mathbb{R} \setminus \{3\}$

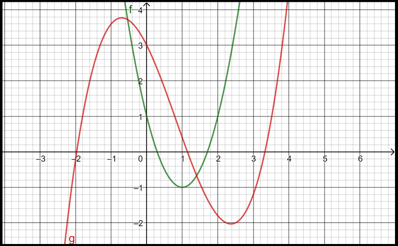
nein

a)3 b) 14

$\frac{3}{2}$

$\{x \mid x \geq \frac{3}{2}\}$

ja



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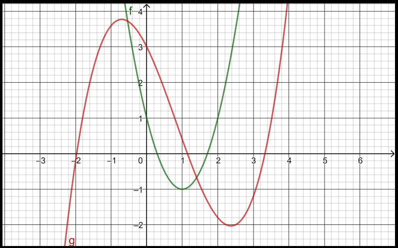
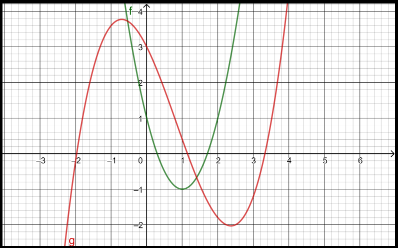


$\frac{-1}{2}$ und $\frac{3}{2}$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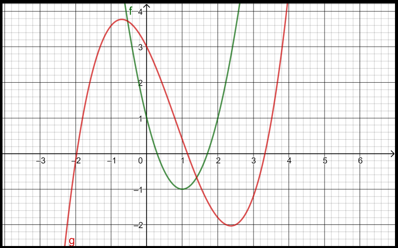

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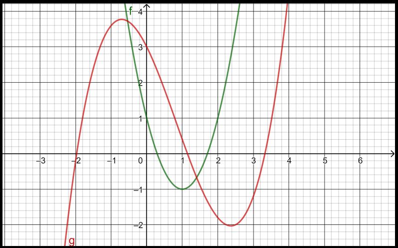

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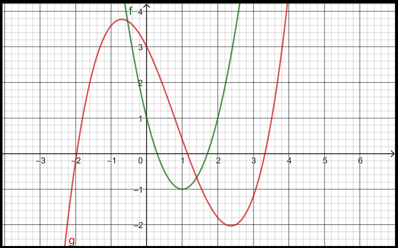

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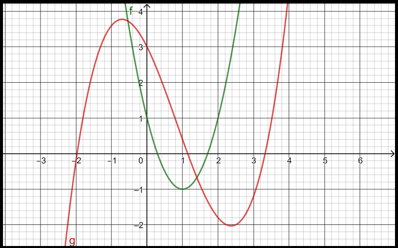

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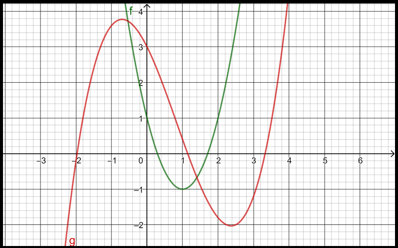


3

$\sqrt{a^2 + b^2}$, $a \cdot b$ und $\frac{a}{b}$

$2a + 1$

$$2(3x + 1)$$

$$2a\sqrt{(x+3)(x-3)}$$

$a(a-2b)$

$x^2y^2(x^2 - y^2)$

$3x^2(y - z)(y + z)$

$$\frac{3xy^2z+x^2z^2+2yz^3}{x^3y^3}$$

$$\frac{p^3 r^3}{q^3}$$

$$\frac{5a^2-2ab-b^2}{3a(a-b)}$$

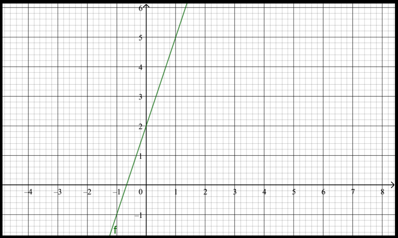
$$\frac{5z-3y}{z-y}$$

$$\frac{a^2}{b(c-a)}$$

b

$$\frac{5}{x-y}$$

$$\frac{b}{a-b}$$



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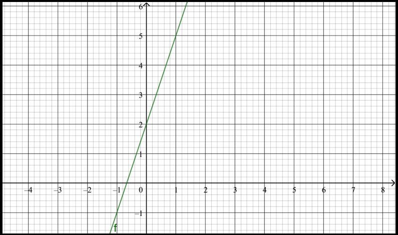
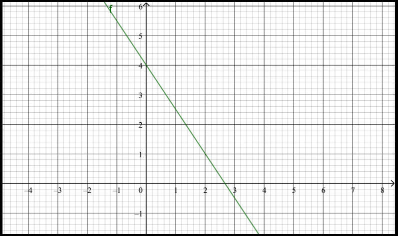


$$f(x) = 3x + 2$$



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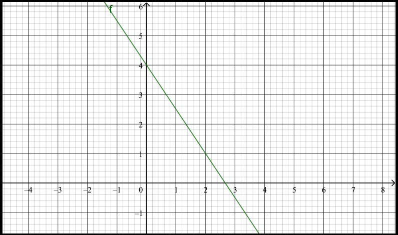
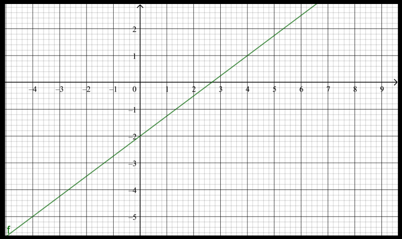


$$f(x) = -\frac{3}{2}x + 4$$



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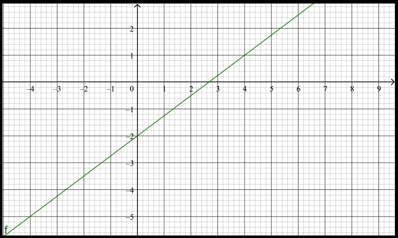
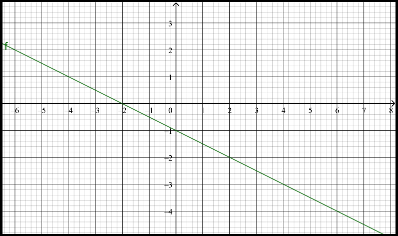


$$f(x) = \frac{3}{4}x - 2$$



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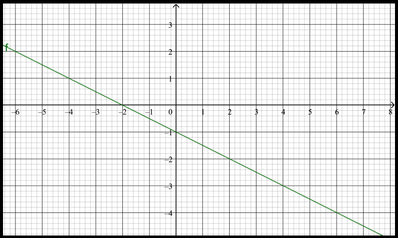
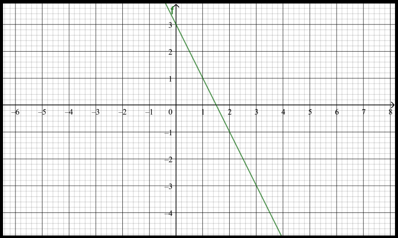


$$f(x) = -\frac{1}{2}x - 1$$



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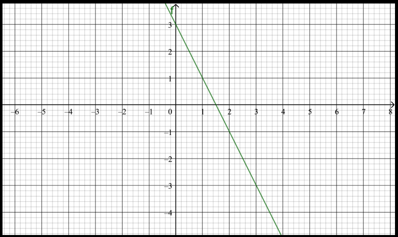

$$f(x) = -2x + 3$$

x ist höchstens 2   x ist mindestens 2   x ist ungleich 2

Ja

1.24

a) $1 \cdot 10^4$ b) $4.5 \cdot 10^6$

a) $1 \cdot 10^{-6}$ b) $1.324 \cdot 10^{-2}$

a) $3.48 \cdot 10^5$ b) $2.30 \cdot 10^{-3}$

11

0.6

18

$$6x + 6y \quad \text{bzw.} \quad 6(x+y)$$

a) 17 b) 37