Funktionen verschieben, strecken und spiegeln

Stufe 3: Parameter a, b, c, d ablesen

Name: _____ Datum: _____

Lies die Parameter von f(x) = a · g(b · (x – c)) + d ab und gib sie in der Reihenfolge a; b; c; d an.

1) $f(x) = \frac{4}{x+2} - 6$ _____

2) $f(x) = -\frac{2}{4(x+2)} + 6$ _____

3) $f(x) = 4\sin(-2(x-5)) + 6$ _____

4) $f(x) = |x+2| - 3$ _____

5) $f(x) = \sqrt{x} + 3$ _____

6) $f(x) = -3(4(x+2))^2 + 3$ _____

7) $f(x) = \sqrt{4(x-5)} + 3$ _____

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

9) $f(x) = \frac{1}{x-5} - 1$ _____

10) $f(x) = \frac{1}{2}(4(x-3))^2 - 6$ _____

11) $f(x) = -(2(x-4))^2 + 2$ _____

12) $f(x) = \sin(2(x-4)) - 2$ _____

13) $f(x) = -\frac{1}{2}\sin(x+2) + 5$ _____

14) $f(x) = 3\sin(x+1) + 2$ _____

Lösungen: Funktionen verschieben, strecken und spiegeln

Stufe 3: Parameter a, b, c, d ablesen

1) $a = 4,\ b = 1,\ c = -2,\ d = -6$

2) $a = -2,\ b = 4,\ c = -2,\ d = 6$

3) $a = 4,\ b = -2,\ c = 5,\ d = 6$

4) $a = 1,\ b = 1,\ c = -2,\ d = -3$

5) $a = 1,\ b = 1,\ c = 0,\ d = 3$

6) $a = -3,\ b = 4,\ c = -2,\ d = 3$

7) $a = 1,\ b = 4,\ c = 5,\ d = 3$

8) $a = -2,\ b = 3,\ c = 5,\ d = -2$

9) $a = 1,\ b = 1,\ c = 5,\ d = -1$

10) $a = \frac{1}{2},\ b = 4,\ c = 3,\ d = -6$

11) $a = -1,\ b = 2,\ c = 4,\ d = 2$

12) $a = 1,\ b = 2,\ c = 4,\ d = -2$

13) $a = -\frac{1}{2},\ b = 1,\ c = -2,\ d = 5$

14) $a = 3,\ b = 1,\ c = -1,\ d = 2$