Task card 1 Transformations of Functions

The graph of $y = x^3$ is reflected across the x-axis, stretched vertically by a factor of 3, shifted 2 units left, then shifted 2 units down. Write the equation of the new graph.

Task card 2 Transformations of Functions

The point (-4, 5) is on the graph of y = f(x). Which point must be on the graph of g(x) = -f(x + 5) + 3?

Task card 3 Transformations of Functions

The point (-3, 3) is on the graph of y = f(x). Which point must be on the graph of g(x) = -2f(x + 3) + 1?

Task card 4 Transformations of Functions

The graph of y = |x| is shifted 4 units left, then shifted 4 units down. Write the equation of the new graph.

Task card 5 Transformations of Functions

The point (-4, -5) is on the graph of y = f(x). Which point must be on the graph of g(x) = 2f(x - 1) + 3?

Task card 6 Transformations of Functions

The graph of $y = x^2$ is stretched vertically by a factor of 3, shifted 3 units right, then shifted 2 units down. Write the equation of the new graph.

Task card 7 Transformations of Functions

The graph of $y = x^3$ is reflected across the x-axis, shifted 2 units left, then shifted 3 units up. Write the equation of the new graph.

Task card 8 Transformations of Functions

The point (4, 1) is on the graph of y = f(x). Which point must be on the graph of g(x) = 3f(x - 1) - 3?

Task card 9 Transformations of Functions

The point (-5, -4) is on the graph of y = f(x). Which point must be on the graph of g(x) = -2f(x + 3) + 4?

Task card 10 Transformations of Functions

The graph of $y = x^2$ is reflected across the x-axis, shifted 6 units right, then shifted 4 units up. Write the equation of the new graph.

Task card 11 Transformations of Functions

The point (-2, 3) is on the graph of y = f(x). Which point must be on the graph of g(x) = 3f(x - 2) - 1?

Task card 12 Transformations of Functions

The graph of y = |x| is reflected across the x-axis, stretched vertically by a factor of 3, shifted 5 units left, then shifted 4 units down. Write the equation of the new graph.

Task card 13 Transformations of Functions

The graph of $y = x^2$ is shifted 5 units left, then shifted 1 unit up. Write the equation of the new graph.

Task card 14 Transformations of Functions

The point (1, -2) is on the graph of $y = f(x)$. Which point must be on the graph of $g(x) = f(x + 5) + 4$?

Task card 15 Transformations of Functions

The point (-3, 4) is on the graph of $y = f(x)$. Which point must be on the graph of $g(x) = -f(x + 3) - 4$?

Task card 16 Transformations of Functions

The graph of $y = x^3$ is reflected across the x-axis, stretched vertically by a factor of 2, shifted 4 units left, then shifted 6 units down. Write the equation of the new graph.

Task card 17 Transformations of Functions

The point (-2, -1) is on the graph of $y = f(x)$. Which point must be on the graph of $g(x) = 3f(x - 4) - 3$?

Task card 18 Transformations of Functions

The graph of $y = x^3$ is reflected across the x-axis, shifted 1 unit right, then shifted 3 units down. Write the equation of the new graph.

Task card 19 Transformations of Functions

The graph of y = |x| is reflected across the x-axis, shifted 3 units right, then shifted 5 units up. Write the equation of the new graph.

Task card 20 Transformations of Functions

The point (-1, -3) is on the graph of y = f(x). Which point must be on the graph of g(x) = 2f(x + 3) + 1?

Task card 21 Transformations of Functions

The point (4, 2) is on the graph of y = f(x). Which point must be on the graph of g(x) = f(x - 5) - 3?

Task card 22 Transformations of Functions

The graph of $y = x^3$ is stretched vertically by a factor of 3, then shifted 4 units left. Write the equation of the new graph.

Task card 23 Transformations of Functions

The point (0, 4) is on the graph of y = f(x). Which point must be on the graph of g(x) = f(x + 5) + 3?

Task card 24 Transformations of Functions

The graph of y = |x| is reflected across the x-axis, stretched vertically by a factor of 2, then shifted 1 unit left. Write the equation of the new graph.

Transformations of Functions Task Cards

Recording sheet · Grade 11 · Use the rules for shifts, stretches and reflections.

Name: _____ Date: _____

Scan to check your answers

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Transformations of Functions Task Cards: Answer Key

Grade 11 · Medium

The answers online

1. $y = -3(x + 2)^3 - 2$	**2.** (-9, -2)	**3.** (-6, -5)
4. $y = \|x + 4\| - 4$	**5.** (-3, -7)	**6.** $y = 3(x - 3)^2 - 2$
7. $y = -(x + 2)^3 + 3$	**8.** (5, 0)	**9.** (-8, 12)
10. $y = -(x - 6)^2 + 4$	**11.** (0, 8)	**12.** $y = -3\|x + 5\| - 4$
13. $y = (x + 5)^2 + 1$	**14.** (-4, 2)	**15.** (-6, -8)
16. $y = -2(x + 4)^3 - 6$	**17.** (2, -6)	**18.** $y = -(x - 1)^3 - 3$
19. $y = -\|x - 3\| + 5$	**20.** (-4, -5)	**21.** (9, -1)
22. $y = 3(x + 4)^3$	**23.** (-5, 7)	**24.** $y = -2\|x + 1\|$