[illegible] Transformations (4)   Name: Key

Given $f(x) = 4^x$, find $g(x)$ when the function is....

1) Translated [illegible] units down

$g(x) = 4^x - 2$

2) Translated 3 units to the right

$g(x) = 4^{(x-3)}$

3) reflected over the x axis

$g(x) = -(4^x)$

$g(x) = -4^x$

4) reflected over the y axis

$g(x) = 4^{(-x)}$

5) vertically stretched by 2

$g(x) = 2(4^x)$

6) vertically compressed by [illegible]

$g(x) = \frac{2}{3}(4^x)$

7) horizontally stretched by 3

$g(x) = 4^{(\frac{1}{3}x)}$

8) horizontally compressed by [illegible]

$g(x) = 4^{(3x)}$

Given $f(x) = \log_4 x$, find $g(x)$ when the function is....

1) Translated 3 units down and 7 units right

$g(x) = \log_4(x-7) - 3$

2) Translated 3 units to the left and 5 units up

$g(x) = \log_4(x+3) + 5$

3) reflected over the x axis

$g(x) = -\log_4 x$

4) reflected over the y axis

$g(x) = \log_4(-x)$

5) vertically stretched by 4

$g(x) = 4\log_4 x$

6) vertically compressed by [illegible]

$g(x) = \frac{2}{3}\log_4 x$

7) horizontally stretched by 2

$g(x) = \log_4(\frac{1}{2}x)$

8) horizontally compressed by [illegible]

$g(x) = \log_4(3x)$

9) horizontally compressed by [illegible]

$g(x) = \log_4(\frac{3}{2}x)$

10) translated 8 units right and 2 units down

$g(x) = \log_4(x-8) - 2$