[illegible] (3) Name: [illegible]

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 $\frac{2}{3}$

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

7) horizontally stretched by 2

$g(x) = 4^{(\frac{1}{2}x)}$

8) horizontally compressed by $\frac{1}{3}$

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

Given $f(x) = \log_3 x$ find $g(x)$ when the function is . . . .

1) Translated [illegible] units down and [illegible] units right

$g(x) = \log_3(x-7) - 3$

2) Translated [illegible] units [illegible] and [illegible] units up

$g(x) = \log_3(x+5) + 5$

3) reflected over the x-axis

$g(x) = -\log_3 x$

4) reflected over the y-axis

$g(x) = \log_3(-x)$

5) vertically stretched by [illegible]

$g(x) = 4\log_3 x$

6) vertically compressed by [illegible]

$g(x) = \frac{2}{3}\log_3 x$

7) horizontally stretched by 2

$g(x) = \log_3(\frac{1}{2}x)$

8) Horizontally compressed by [illegible]

$g(x) = \log_3(3x)$

9) Horizontally compressed by [illegible]

$g(x) = \log_3([illegible]x)$

10) translated [illegible] units right and [illegible] units down

$g(x) = \log_3(x-3) - 2$