

Transformations of Function Graphs

Practice and Problem Solving: Modified

Describe the change, $g(x)$, in terms of $f(x)$ for the transformation described. The first one is done for you.

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|--|----------------------------|
| 1. vertical translation 8 units down | $g(x) = f(x) - 8$
_____ |
| 2. horizontal stretch by a factor of 4 | _____ |
| 3. vertical compression by a factor of $\frac{1}{4}$ | _____ |
| 4. horizontal translation 5 units left | _____ |
| 5. reflection across the y -axis | _____ |
| 6. reflection across the y -axis followed by a vertical shift 3 units up | _____ |
| 7. horizontal stretch by a factor of 5 followed by a horizontal shift right 2 units | _____ |
| 8. vertical compression by a factor of $\frac{1}{8}$ followed by a vertical shift down 6 units | _____ |
| 9. reflection across the x -axis followed by a vertical stretch by a factor of 2, a horizontal shift 7 units left, and a vertical shift 5 units down | _____ |