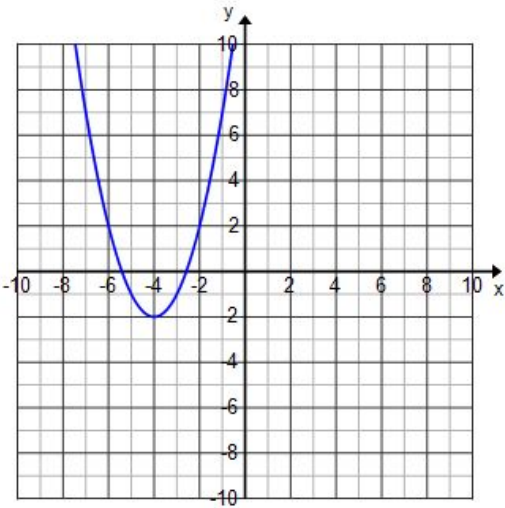
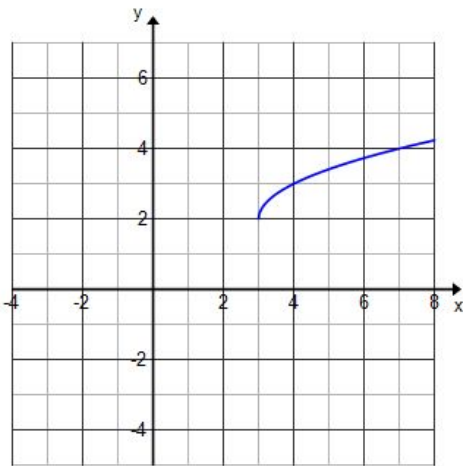


1-4 Linear Transformations	Name
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<u>Describe each transformation from $g(x)$ to $f(x)$.</u>		
1. $f(x) = -3(x+2) - 4$ from $g(x) = 3x$	2. $f(x) = (x-1) + 6$ from $g(x) = x$	3. $f(x) = 4(x-3) - 7$ from $g(x) = 4(x-1)$

Graph the transformed function of the provided graph.

<p>4. Graph $f(x-1) + 4$</p> 	<p>5. Graph $f(x+2) - 3$</p> 
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Make a new equation in the form of $g(x) = a(x-h) + k$, that is the transformation of the given function $f(x)$.

<p>6. $f(x) = -6x$ Translated to the right 2 units and up 7 units.</p>	<p>7. $f(x) = -4x$ Reflected and translated down 3 units.</p>	<p>8. $f(x) = 5x + 8$ Translated to the right 3 units and down 6 units.</p>
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9. Equations:

$$f(x) = \frac{1}{2}x$$

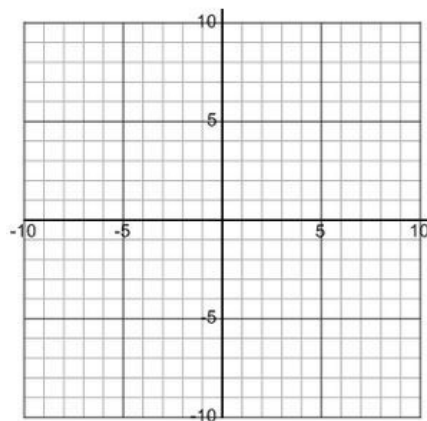
$$g(x) = \frac{1}{2}(x - 4) + 3$$

a) Describe transformation from $f(x)$ to $g(x)$.

b) Create a table for $f(x)$ and $g(x)$.

x	f(x)	g(x)

c) Graph $f(x)$ and $g(x)$.



Using the information, write an equation of the line in point-slope & slope-intercept

10. Through: $(2, -3)$ slope: -4

Point-Slope:

Slope-Intercept:

11. Through: $(-2, -4)$ and $(0, 1)$

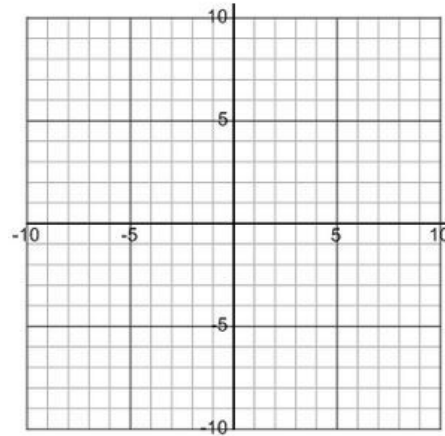
Point-Slope:

Slope-Intercept:

12. Table of values

x	y
1	-7
2	-4
3	-1
4	2
5	5
6	8

a) Graph:



b) Write Equation that models the table.

c) Invent a story problem that models this situation.

13. Sprint advertises service for 3 cents per minute plus a monthly fee of \$29.95.

a) Write an equation to model the situation. Be sure to indicate what the variables represent.

b) If Parker's phone bill for August was \$38.95, find the number of minutes he used.

14. KP keeps his life savings in a jar consisting of only dimes and quarters. The total value of the coins is currently \$12.00.

a) If d represents dimes and q represents quarters, write an equation to model the situation. (d, q)

b) Solve for q .

c) If you graphed this line, what does the x-intercept represent.

d) What does the y-intercept represent?