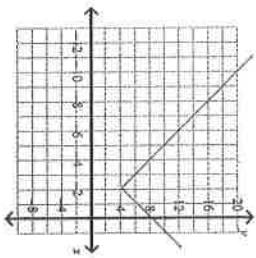
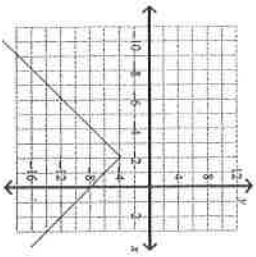


What is the equation of the absolute value function?

16.



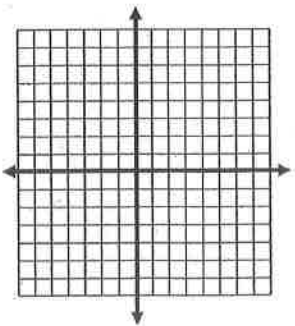
18.

$$f(x) = \begin{cases} 5 & x \leq -3 \\ 2x + 1 & -2 \leq x \leq 1 \\ -2x - 3 & x > 2 \end{cases}$$

$$f(-4) =$$

$$f(0) =$$

$$f(3) =$$



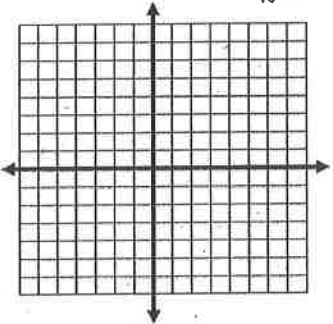
17.

$$f(x) = \begin{cases} -3x + 1 & x \leq 2 \\ 5x - 4 & x > 2 \end{cases}$$

$$f(-4) =$$

$$f(8) =$$

$$f(2) =$$



Compare the graph of each function with the graph of $f(x) = |x|$.

19. $g(x) = \frac{1}{7}|x|$

- a. translation down 7 units
- b. vertical stretch by factor of 7
- c. reflection across the x-axis
- d. vertical compression by factor of 7

20. $g(x) = -6|x|$

- a. translation right 6 units and reflection across the y-axis
- b. vertical compression by factor of 6 and reflection across the y-axis
- c. translation down 6 units and reflection across the x-axis
- d. vertical stretch by factor of 6 and reflection across the x-axis

21. Camp Canine is a kennel for boarding dogs while their owners are on vacation. The graph shows three tiers of boarding pricing. Ian boards his dog at Camp Canine. He is thinking about extending his vacation from 7 to 8 days. About how much will Ian save if he boards his dog 8 days instead of 7 days?

