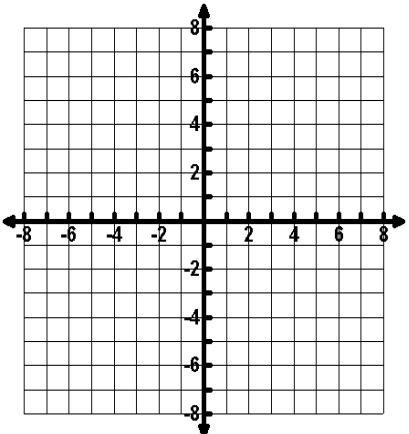
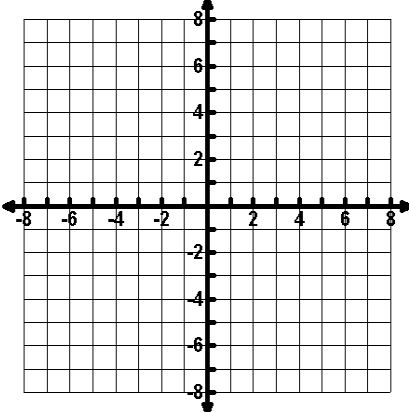


Name _____

Geometric Sequences and Series

<p>1. Given: 3, -6, 12, -24, ... Find a_9</p>	<p>2. Given 2700, 900, 300, 100, ... Find a_8</p>
<p>3. Given: $a_n = 5(2)^{n-1}$ Find 1st 5 terms of Geometric Sequence</p>	<p>4. Evaluate the geometric series described $\sum_{k=1}^8 3(4)^{k-1}$</p>
<p>5. Determine the number of terms n in the geometric series $A_1 = 4, r = 3, S_n = 4372$</p>	<p>6. Given 2 terms in the geometric sequence, find the formula $a_{11} = 2025$ and $a_7 = 400$</p>

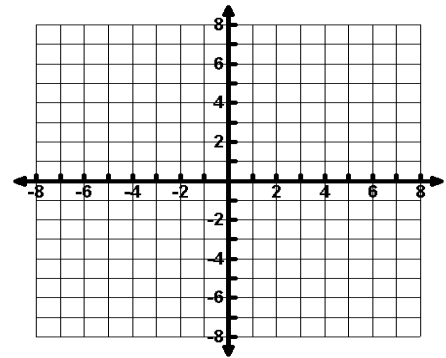
Graph the following piecewise functions

<p>7.</p> $f(x) = \begin{cases} -x & x \leq -2 \\ 3x & -2 < x \leq 2 \\ -2 & x > 2 \end{cases}$ <p>INC:</p> <p>DEC:</p> <p>Constant:</p> <p>Point of Discontinuity</p> <p>What is $f(-1)$?</p> 	<p>8.</p> $g(x) = \begin{cases} x^2 - 1, & x < -1 \\ 3 - x, & x \geq -1 \end{cases}$ <p>Domain:</p> <p>Range:</p> <p>Point of Discontinuity</p> <p>What is $g(3)$?</p> 
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$$9. f(x) = \begin{cases} 6 & x < -3 \\ 2 & -3 \leq x \leq 1 \\ 4 & 1 < x \leq 3 \\ -3 & x > 3 \end{cases}$$

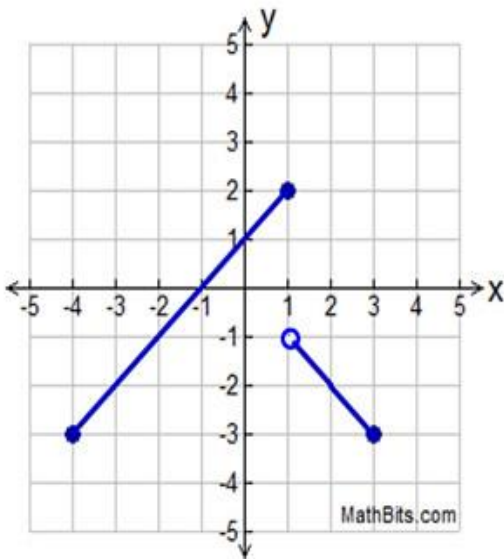
Range:

Points of Discontinuity:

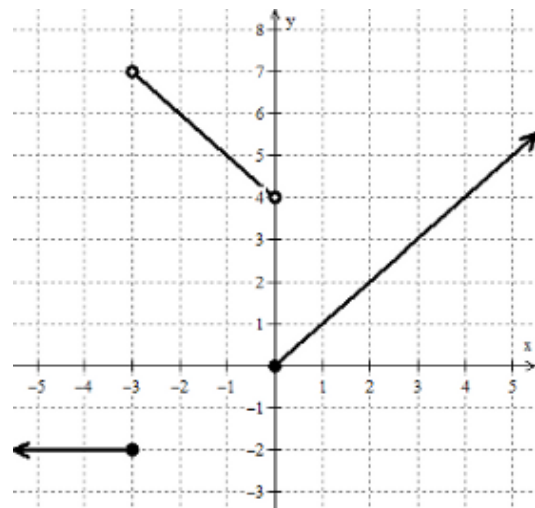


Write the equation of the piecewise function

$$10. f(x) = \begin{cases} \underline{\hspace{2cm}}, & \underline{\hspace{2cm}} \\ \underline{\hspace{2cm}}, & \underline{\hspace{2cm}} \end{cases}$$



$$11. f(x) = \begin{cases} \underline{\hspace{2cm}}, & \underline{\hspace{2cm}} \\ \underline{\hspace{2cm}}, & \underline{\hspace{2cm}} \\ \underline{\hspace{2cm}}, & \underline{\hspace{2cm}} \end{cases}$$

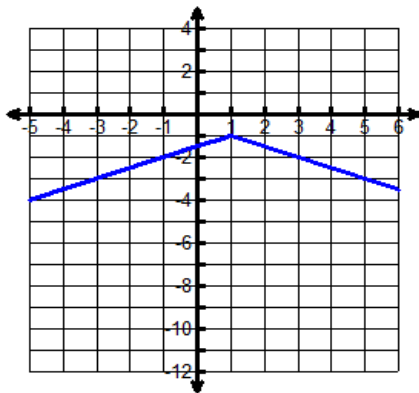


write as an absolute value given the graph

12.

V: _____

a = _____

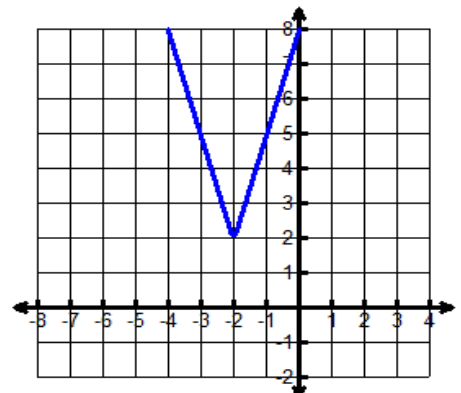


F(x) = _____

13.

V: _____

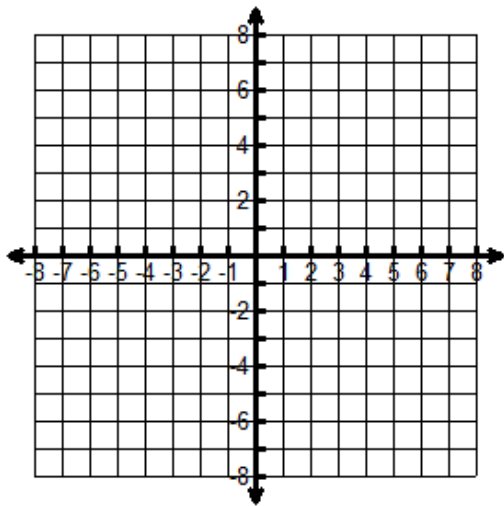
a = _____



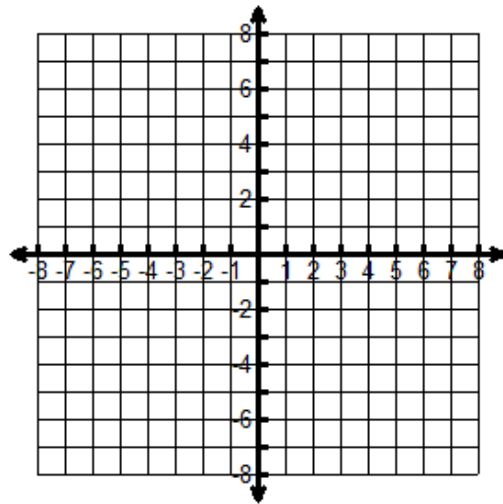
G(x) = _____

Graph each absolute value function

14. $g(x) = \frac{1}{2}|x - 4| - 3$



15. $h(x) = 4|x - 2|$



Solve each absolute value equation

16. $2|x - 1| + 4 = -12$

17. $-|x + 3| + 12 = 7$

18. $-|x - 4| = 2x + 7$

Solve each equation for the given variable

19. $4v + gh = 2z$ Solve for h

20. $\frac{2a - 3b}{7} = D$ Solve for a

21. $B = \frac{3}{4}(N + 5)$ Solve for N