

Ready, Set, Go!

Ready

Topic: Finding the x-intercepts in a quadratic function

Find the x-intercepts of the following quadratic functions.

1. $y = x^2 + 3x - 10$

2. $y = x^2 + 8x + 7$

3. $y = 6x^2 + 7x - 20$

4. $y = (x - 2)^2 - 9$

5. $y = -(x + 3)^2 + 9$

6. $y = \frac{1}{2}(x - 1)^2 - 2$



Set

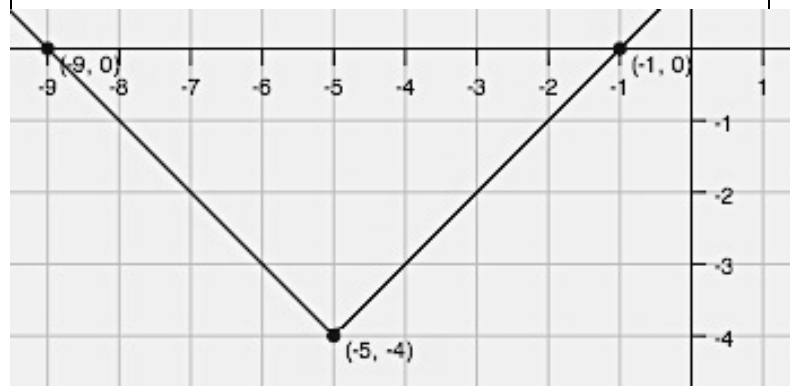
Topic: Absolute value equations

Use the given information to write the indicated form of the function.

7. Piecewise equation

8. Absolute value equation

x	$f(x)$
-1	9
0	6
1	3
2	0
3	3
4	6



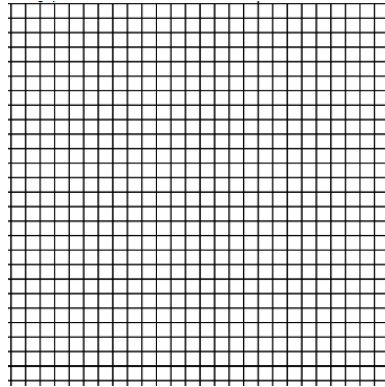
9. Make a table of values. Be sure to include the vertex in the table.

$$h(x) = 5|x - 6| - 8$$

x	$h(x)$

10. Graph

$$f(x) = \begin{cases} -\frac{2}{3}(x-6)+4, & x < 6 \\ \frac{2}{3}(x-6)+4, & x \geq 6 \end{cases}$$



Go

Topic: Interpreting absolute value.

Evaluate each expression for the given value of the variable.

11. $-s$; $s = 4$

12. $-t$; $t = -7$

13. $-x$; $x = 0$

14. $-w$; $w = -11$

15. $|v|$; $v = -25$

16. $-(a)$; $a = -25$

17. $-(-n)$; $n = -2$

18. $| -(-p) |$; $p = -6$

19. $| -(-q) |$; $p = 8$

20. $-| -(-r) |$; $r = -9$

