

Algebra 2  
2.6 Homework #2

Name: \_\_\_\_\_

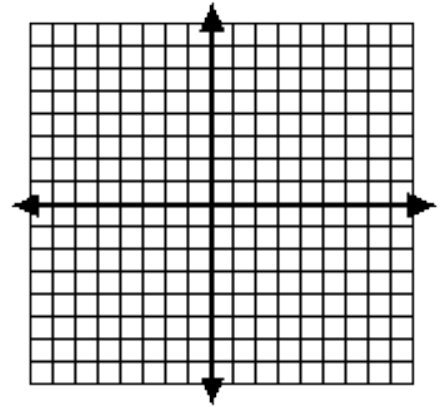
Graph each piece-wise function. Determine the domain and range. Then evaluate the function at the specified values.

1.

$$f(x) = \begin{cases} 3x + 2 & \text{if } x > 0 \\ -2x - 4 & \text{if } x \leq 0 \end{cases}$$

Domain:

Range:



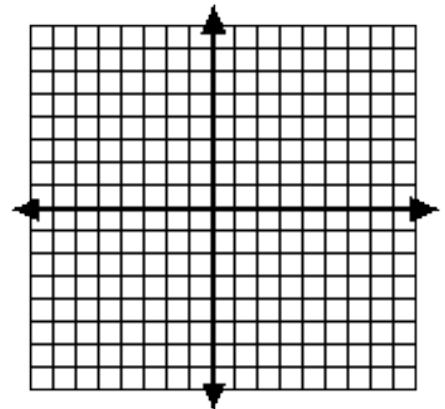
Evaluate:

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

Domain:

Range:



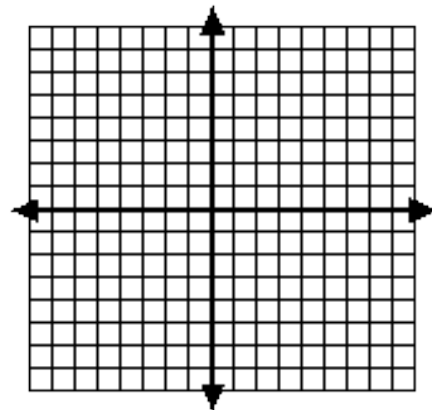
Evaluate:

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

**Domain:**

**Range:**



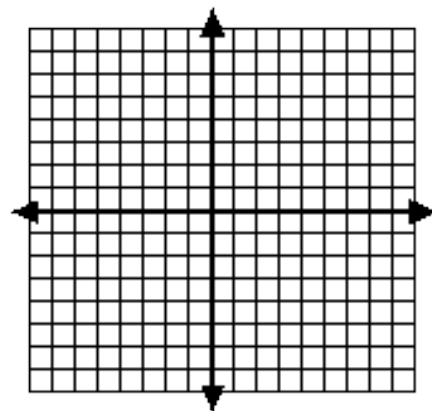
**Evaluate:**

$f(-5)$	$f(-1)$	$f(3)$

$$4. f(x) = \begin{cases} 2x + 1 & \text{if } x \geq -3 \\ 2x - 3 & \text{if } x < -3 \end{cases}$$

**Domain:**

**Range:**



**Evaluate:**

$f(-5)$	$f(-1)$	$f(3)$