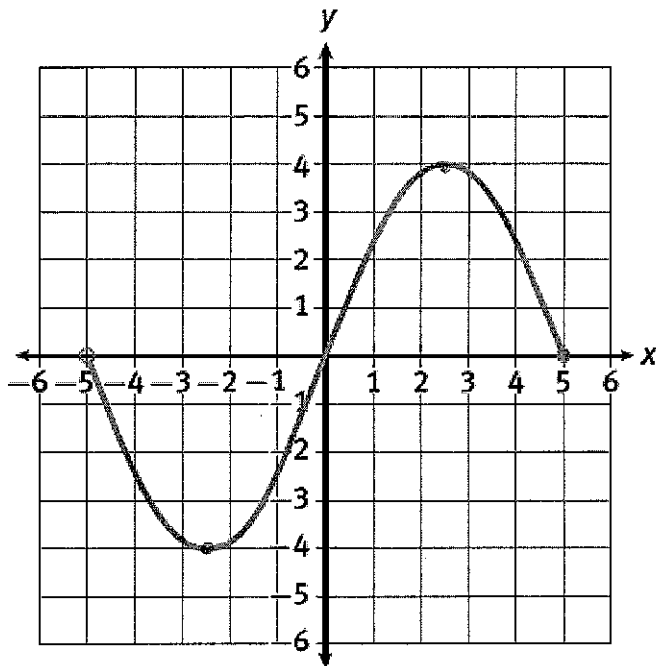


Name KEY

### Characteristics of Graphs Worksheet



Domain:  $(-5, 5]$

Range:  $[-4, 4]$

Max:  $(2.5, 4)$  absolute  $(-5, 0)$  relative

Min:  $(-2.5, -4)$  absolute  $(5, 0)$  relative

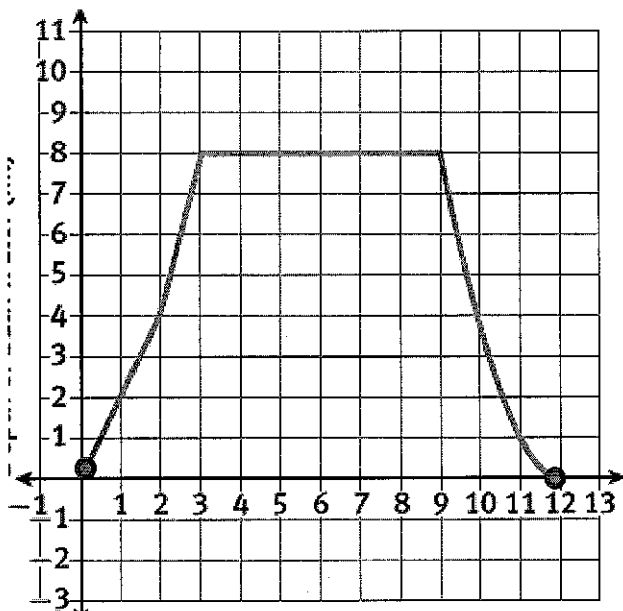
Discrete or continuous?

y-intercept(s):  $(0, 0)$

x-intercept(s):  $(-5, 0)(0, 0)(5, 0)$

$7 * f(5) =$  0

$f(5) = 0$  and  $0 * 7 = 0$



Domain:  $[0, 12]$

Range:  $[0, 8]$

Max:  $y = 8$

Min:  $(0, 0)(12, 0)$  absolute

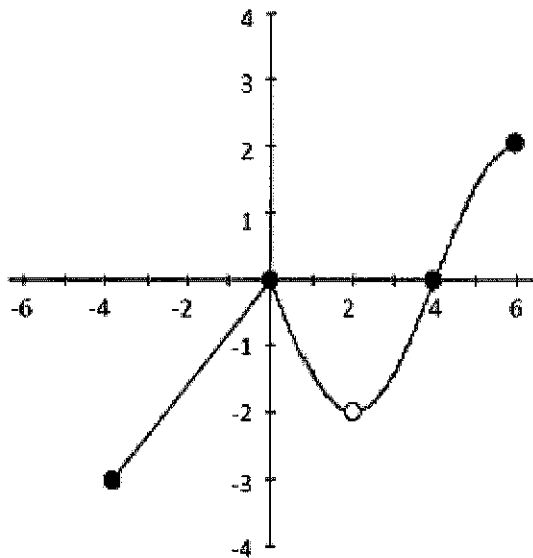
Interval of increase:  $[0, 3]$

Interval of decrease:  $[9, 12]$

$f(2) + f(9) =$  12

$f(2) = 4$

$f(9) = 8$  and  $4 + 8$



Domain  $[-4, 6]$

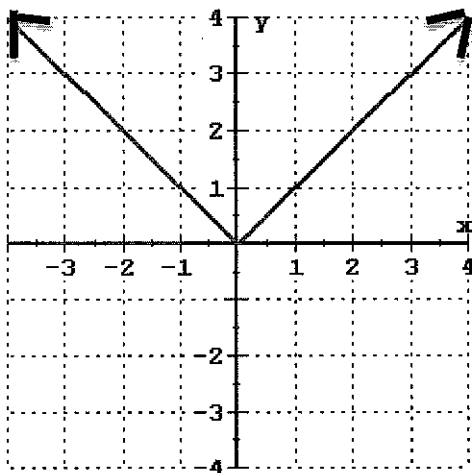
Range  $[-3, 2]$

Intervals of increase  $[-4, 0] \cup (2, 6]$

Interval of decrease  $[0, 2)$   
 Min  $(2, -2)$  rel Max  $(0, 0)$  relative

$f(-4) + f(6)$   $-1$

$f(-4) = -3$  and  $-3 + 2$   
 $f(6) = 2$



Domain  $(-\infty, \infty)$

Range  $[0, \infty)$

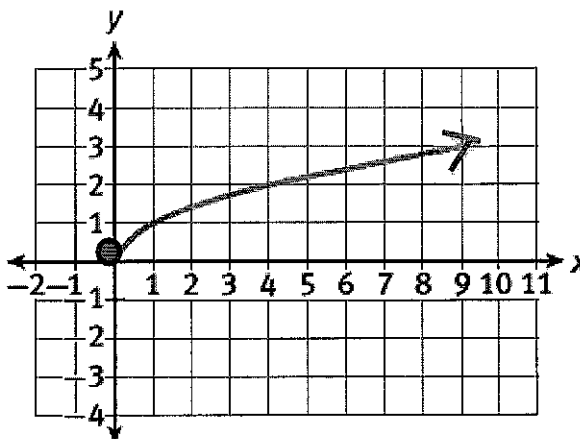
Interval of increase  $[0, \infty)$

Interval of decrease  $(-\infty, 0]$

Min  $(0, 0)$  abs Max —

End Behavior as  $x \rightarrow -\infty, y \rightarrow \infty$

as  $x \rightarrow \infty, y \rightarrow \infty$



Domain  $[0, \infty)$

Range  $[0, \infty)$

Interval of increase  $[0, \infty)$

Interval of decrease —

End Behavior as  $x \rightarrow \infty, y \rightarrow \infty$

No End Behavior as  $x \rightarrow -\infty$