

Name _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

A particle moves from A to B in the coordinate plane. Find the increments Δx and Δy in the particle's coordinates.

1) $A(1, -1), B(9, -2)$

Find an equation for the vertical line and the horizontal line through the given point

2) $(\sqrt{2}, 1.8)$

Write an equation for the line described.

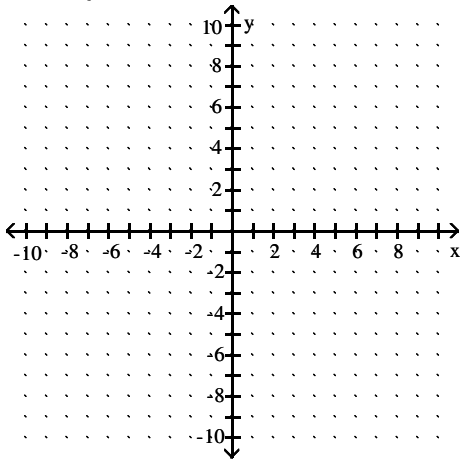
3) Passes through $(1, -5)$ and perpendicular to the line $-7x - 5y = 18$

Graph the function on your calculator to determine the domain and range from the graph.

4) $y = x^{3/2}$

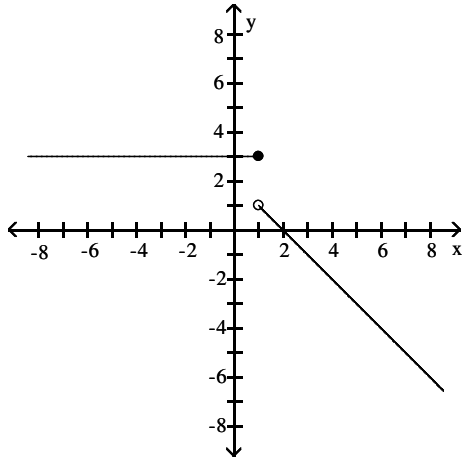
Graph the piecewise-defined function.

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



Find a formula for the function graphed.

6)



Solve the problem.

7) If $f(x) = -2x + 8$ and $g(x) = 5x + 6$, find $g(f(x))$.

Determine if the function is even, odd, or neither.

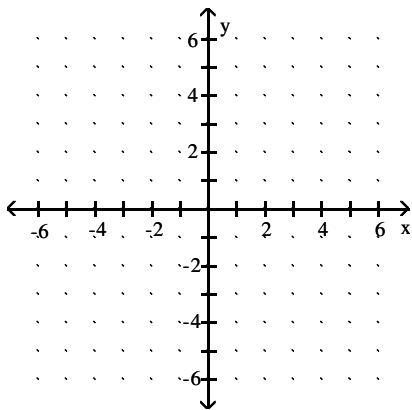
8) $y = \frac{3}{x^2 - 6}$

Use your grapher to find the zero of the function. Round your answer to three decimal places.

9) $f(x) = 9 - 2^x$

Graph the exponential function.

10) $y = 3^x$



Answer Key

Testname: 1_1 TO 1_3 PRACTICE

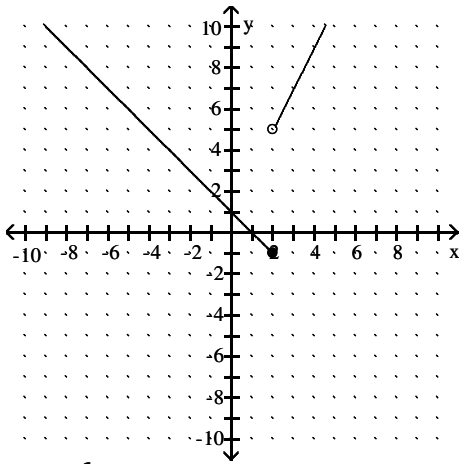
1) $\Delta x = 8; \Delta y = -1$

2) $x = \sqrt{2}$
 $y = 1.8$

3) $y = \frac{5}{7}x - \frac{40}{7}$

4) Domain: $[0, \infty)$; Range: $[0, \infty)$

5)



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

7) $-10x + 46$

8) Even

9) 3.17

10)

