

MAT 095 Module C Mock Test

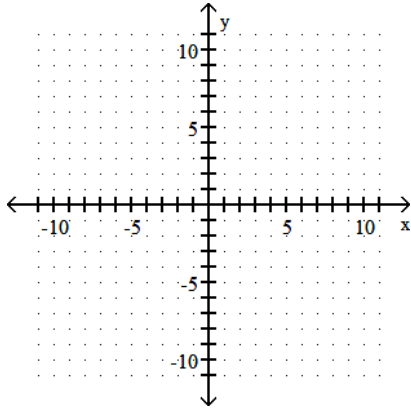
Name _____

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

Graph the linear equation by finding and plotting its intercepts.

1) $4y - 2x = -6$

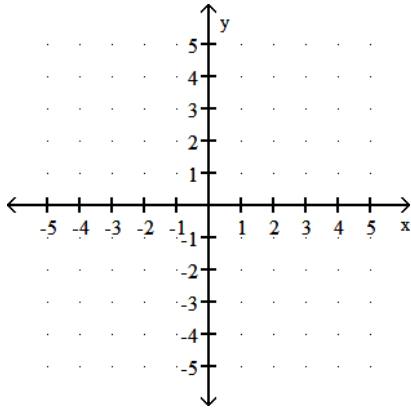
1) _____



Graph the linear equation.

2) $x = -4$

2) _____



MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Find the slope of the line that passes through the points.

3) $(-1, 2)$ and $(3, 7)$

A) $\frac{9}{2}$

B) $-\frac{5}{4}$

C) $\frac{4}{5}$

D) $\frac{5}{4}$

3) _____

Find the slope of the line.

4) $-x + 11y = 132$

A) $m = 11$

B) $m = -\frac{1}{11}$

C) $m = -1$

D) $m = \frac{1}{11}$

4) _____

Determine whether the lines are parallel, perpendicular, or neither.

5) $3x - 2y = 19$
 $2x + 3y = -19$
A) neither

B) parallel

C) perpendicular

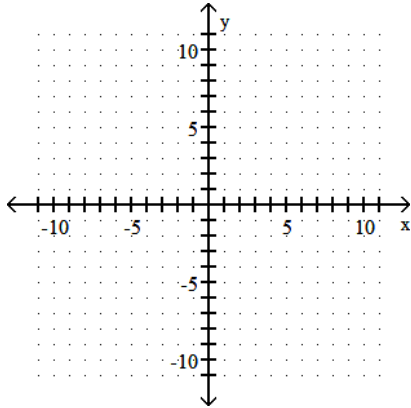
5) _____

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

Use the slope-intercept form to graph the equation.

6) $y = \frac{1}{5}x + 2$

6) _____



MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Write the equation of the line with the given slope, m , and y -intercept, $(0, b)$.

7) $m = \frac{1}{2}; b = 2$

7) _____

A) $y = \frac{1}{2}x - 2$

B) $y = -\frac{1}{2}x + 2$

C) $y = \frac{1}{2}x + 2$

D) $y = -\frac{1}{2}x - 2$

Find an equation of the line with the given slope that passes through the given point. Write the equation in slope-intercept form.

8) $m = -3; (-10, -1)$

8) _____

A) $3x + y = -13$

B) $y = -3x - 31$

C) $y = -3x - 1$

D) $y = -3x + 31$

Find the slope of the line.

9) $x = 3$

9) _____

A) undefined slope

B) $m = 3$

C) $m = -3$

D) $m = 0$

Evaluate the function.

10) Find $f(-4)$ when $f(x) = 5x^2 - 2x - 2$.

10) _____

A) 70

B) 90

C) 80

D) 86

Solve the system of equations by the substitution method.

11)

11) _____

$$\begin{cases} y = 2x - 2 \\ 2y + 8x = -28 \end{cases}$$

A) $(-2, -6)$

B) $(-6, -2)$

C) infinite number of solutions

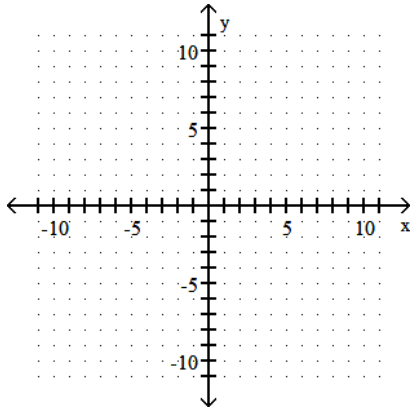
D) no solution

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

Graph the inequality.

12) $4x + y \leq -4$

12) _____



MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Solve the system of equations by the addition method.

13)

$$\begin{cases} x - 3y = 21 \\ 2x - 4y = 34 \end{cases}$$

A) (8, -3)

B) (9, -4)

C) (-9, -3)

D) no solution

13) _____

Without solving, choose the correct solution by deciding which choice satisfies the given conditions.

14) Adam has a total of 66 coins, all of which are either dimes or nickels. The total value of the coins is \$5.60. Find the number of each type of coin.

A) 20 nickels; 46 dimes

B) 46 nickels; 20 dimes

C) 22 nickels; 44 dimes

D) 25 nickels; 41 dimes

14) _____

Solve the equation by factoring.

15) $x^2 + 10x = -16$

A) -8, -2

B) 2, 8

C) -16, -1

D) -8, 2

15) _____

16) $x^2 + 2x - 120 = 0$

A) -12, 10

B) 12, -10

C) 12, 10

D) -12, 1

16) _____

Use the square root property to solve the quadratic equation.

17) $(x + 7)^2 = 20$

A) $2\sqrt{5} \pm 7$

B) $-7 \pm 2\sqrt{10}$

C) $-7 \pm 2\sqrt{5}$

D) $\pm 2\sqrt{5}$

17) _____

Use the quadratic formula to solve the quadratic equation.

18) $2n^2 = -12n - 7$

A) $n = \frac{-12 \pm \sqrt{22}}{2}$

B) $n = \frac{-6 \pm \sqrt{22}}{4}$

C) $n = \frac{-6 \pm \sqrt{22}}{2}$

D) $n = \frac{-6 \pm \sqrt{2}}{2}$

18) _____

Determine the vertex of the graph of the parabola.

19) $y = 2x^2 + 8x + 12$

A) (2, 4)

B) (4, 2)

C) (4, -2)

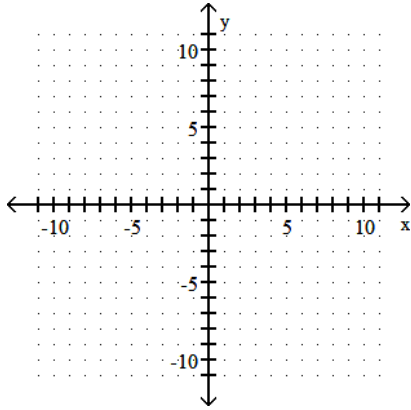
D) (-2, 4)

19) _____

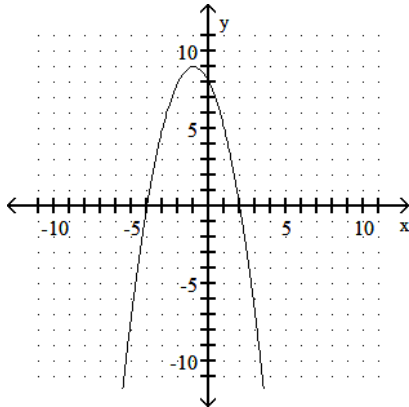
Sketch the graph of the equation. Identify the vertex and the intercepts.

20) $y = -x^2 + 2x + 8$

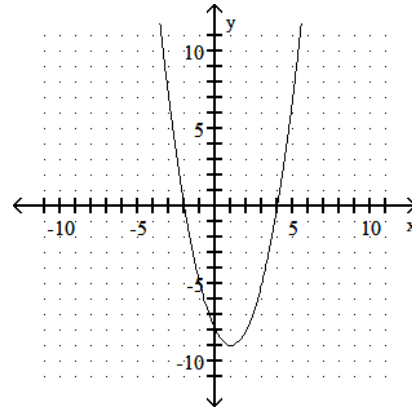
20) _____



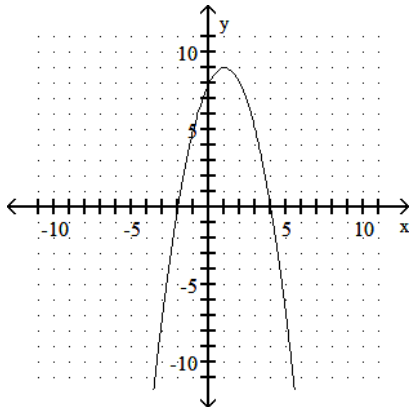
- A) Vertex: $(-1, 9)$;
 x-intercepts: $(-4, 0)$ and $(2, 0)$;
 y-intercept: $(0, 8)$



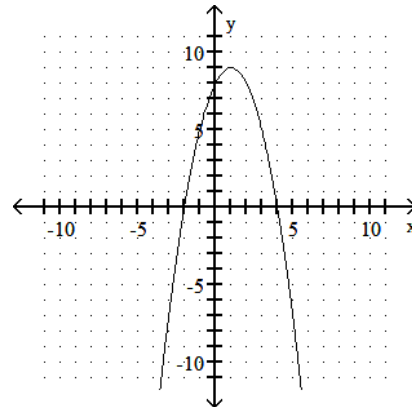
- B) Vertex: $(1, -9)$;
 x-intercepts: $(-2, 0)$ and $(4, 0)$;
 y-intercept: $(0, -8)$



- C) Vertex: $(1, 9)$;
 x-intercepts: $(-2, 0)$ and $(4, 0)$;
 y-intercept: $(0, 8)$



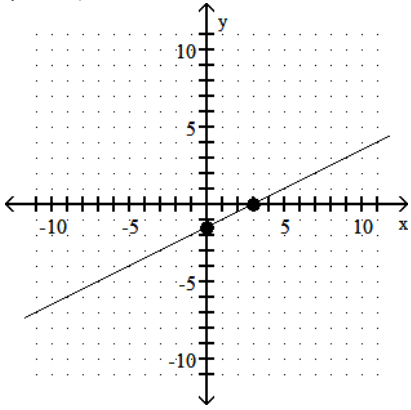
- D) Vertex: $(1, 9)$;
 x-intercepts: $(-4, 0)$ and $(2, 0)$;
 y-intercept: $(0, 8)$



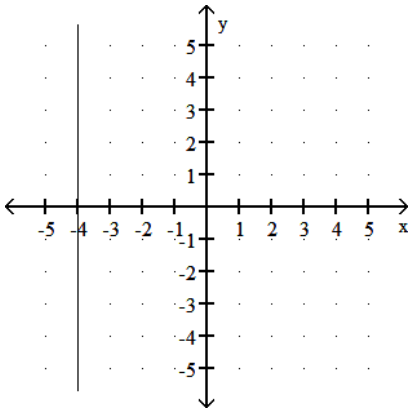
Answer Key

Testname: MOD C MOCK TEST

1) $\left(0, -\frac{3}{2}\right), (3, 0)$



2)

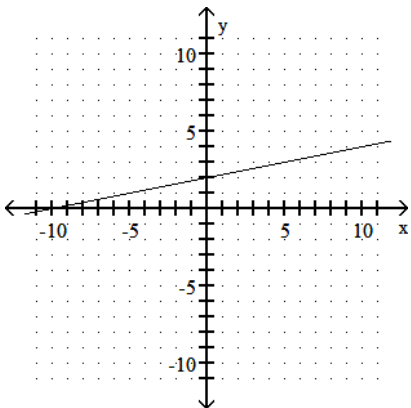


3) D

4) D

5) C

6)



7) C

8) B

9) A

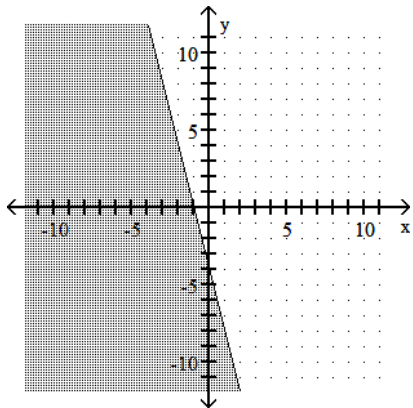
10) D

11) A

Answer Key

Testname: MOD C MOCK TEST

12)



- 13) B
- 14) A
- 15) A
- 16) A
- 17) C
- 18) C
- 19) D
- 20) C