

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

Rewrite as a base to a power, if possible.

- 1) $x^3 \cdot x^7 \cdot x^8$ 1) _____
 A) x^{29} B) x^{10}
 C) x^{18} D) Cannot be simplified

Evaluate.

- 2) $(-6)^2$ 2) _____
 A) -12 B) 36 C) -36 D) 12

Rewrite as a base to a power, if possible.

- 3) $\frac{x^6}{x}$ 3) _____
 A) x B) x^5 C) $\frac{1}{x^5}$ D) x^6

Simplify.

- 4) $(-4n^5)^3$ 4) _____
 A) $-64n^{15}$ B) $-4n^{15}$ C) $64n^{15}$ D) $-64n^5$

Express in scientific notation.

- 5) 300,000,000 5) _____
 A) 3×10^8 B) 3×10^7 C) 3×10^9 D) 3×10^6

Express in standard notation.

- 6) 5.35×10^{-4} 6) _____
 A) -535,000 B) 0.000535 C) 0.00535 D) 0.0000535

Perform the indicated operation. Write the answer in scientific notation.

- 7) $(5.95 \times 10^4)(7.19 \times 10^5)$ 7) _____
 A) 5.2781×10^{20} B) 4.2781×10^{20} C) 5.2781×10^{10} D) 4.2781×10^{10}

Evaluate the expression.

- 8) $2x - 9y$ for $x = 2, y = -7$ 8) _____
 A) 62 B) 69 C) 47 D) 67

Combine like terms, if possible.

- 9) $9a - 2a + 7$ 9) _____
 A) $-7a + 7$ B) $7a + 7$
 C) $14a$ D) Cannot be simplified

Simplify.

- 10) $8x - (8 - 3x)$ 10) _____
 A) $8x - 11$ B) $5x - 8$ C) $11x + 8$ D) $11x - 8$

Solve using the addition and multiplication principles together.

11) $148 = 10x + 18$

A) 13

B) 120

C) 3

D) 124

11) _____

12) $6x - (3x - 1) = 2$

A) $\frac{1}{3}$

B) $-\frac{1}{9}$

C) $-\frac{1}{3}$

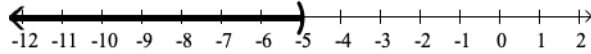
D) $\frac{1}{9}$

12) _____

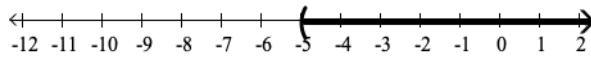
Graph the inequality on a number line. Then write the solution using interval notation.

13) $x > -5$

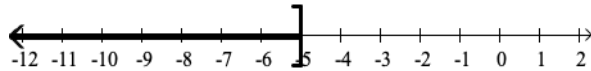
A) $(-\infty, -5)$



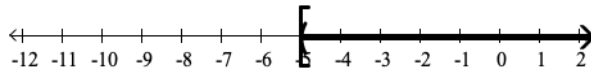
B) $(-5, \infty)$



C) $(-\infty, -5]$



D) $[-5, \infty)$



13) _____

Solve the inequality, and then express in interval notation.

14) $12x - 7 \leq 11x - 18$

A) $x \geq -11; [-11, \infty)$

B) $x \leq -11; (-\infty, -11]$

C) $x < 12; (-\infty, 12)$

D) $x > 12; (12, \infty)$

14) _____

Find the slope of the line going through the given pair of points.

15) (1, -4) and (-9, 9)

A) $-\frac{10}{13}$

B) $-\frac{13}{10}$

C) $-\frac{5}{18}$

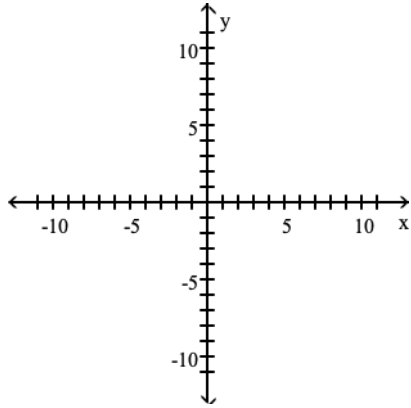
D) $-\frac{18}{5}$

15) _____

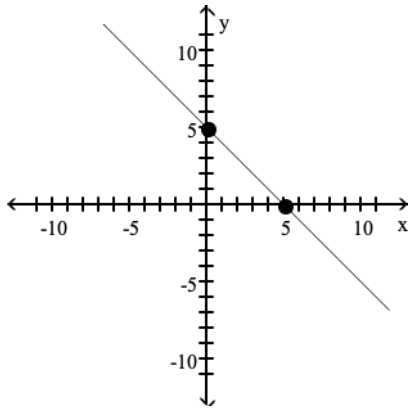
Plot the given points and sketch the line that passes through them.

16) $(-5, 0)$ and $(0, 5)$

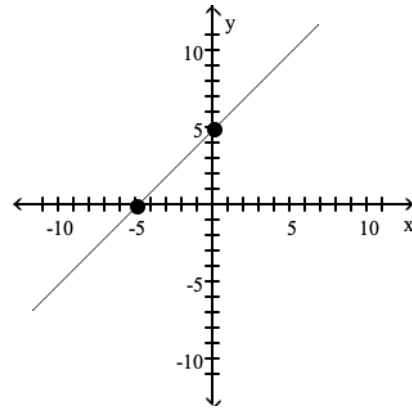
16) _____



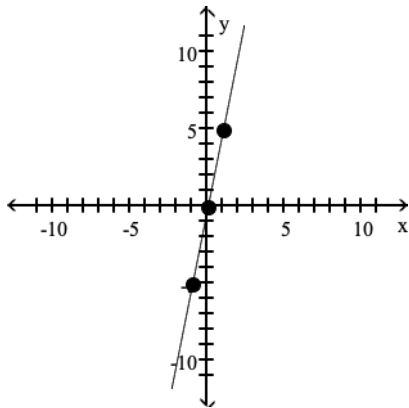
A)



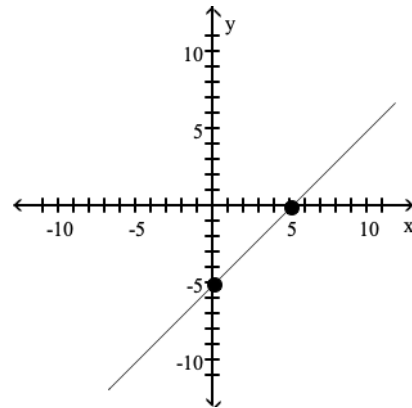
B)



C)



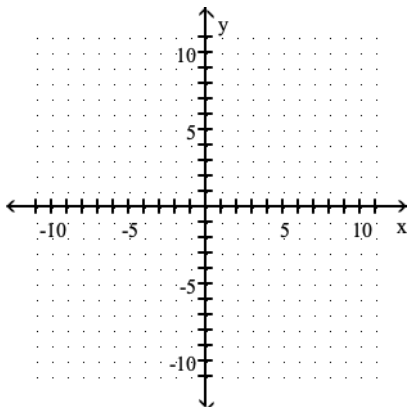
D)



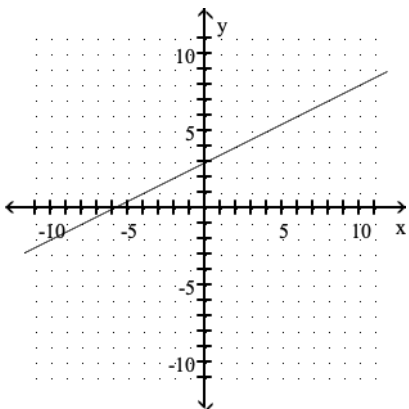
Graph the line.

17) Through $(0, 3)$, $m = \frac{1}{2}$

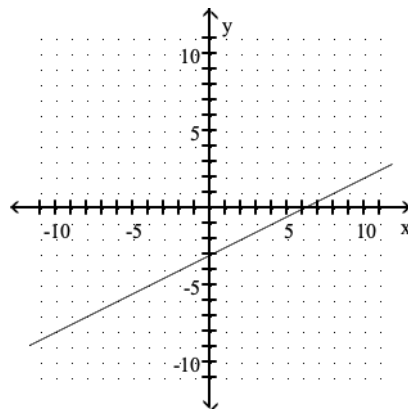
17) _____



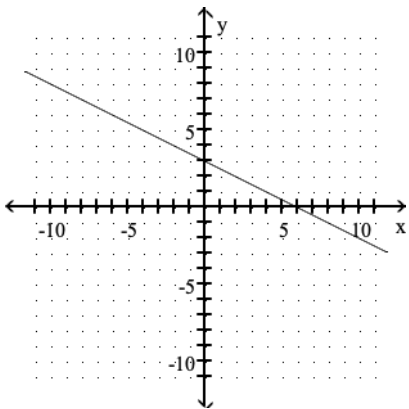
A)



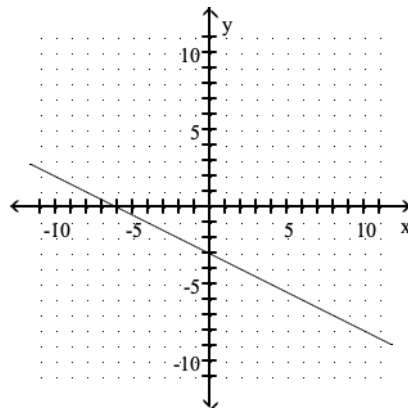
B)



C)



D)



Write the slope-intercept form of the equation for the line passing through the given pair of points.

18) $(-9, 7)$ and $(0, 3)$

18) _____

A) $y = -\frac{16}{3}x + 3$

B) $y = \frac{4}{9}x + 3$

C) $y = -\frac{4}{9}x + 3$

D) $y = \frac{16}{3}x + 3$

Answer the question.

- 19) Is $\left(4, \frac{9}{5}\right)$ a solution of the following system? 19) _____
 $x - 5y = -5$
 $3x - 5y = 21$
A) Yes B) No

Use the elimination method to solve the system.

- 20) $x + 8y = 65$ 20) _____
 $3x + 8y = 67$
A) (1, 8) B) (-8, 1) C) (2, 7) D) No solution

Identify the terms of the polynomial.

- 21) $5x^3 + 6x^2 - 3x + 6$ 21) _____
A) $5x^3, 6x^2, -3x, 6$ B) $5x^3 + 6x^2, -3x + 6$
C) $5x^3, 6x^2, 3x, 6$ D) $5, x^3, 6, x^2, -3, x, 6$

Identify the coefficients of the polynomial.

- 22) $2n^3 - 2n^2 - n$ 22) _____
A) 2, -2, -1 B) 2, 2, -1 C) 2, -2, 1 D) 2, 2, 1

Classify the polynomial by the number of terms. Then identify the degree of the polynomial.

- 23) $-6y^5 + 2y^4 - 5$ 23) _____
A) Trinomial of degree 5 B) Trinomial of degree 10
C) Binomial of degree 5 D) Trinomial of degree 9

Add or subtract horizontally.

- 24) $(2n^5 + 4n^3 + 3) + (5n^5 + 2n^3 + 6)$ 24) _____
A) $7 + 6n^5 + 9n^3$ B) $22n^8$
C) $7n^5 + 6n^3 + 9$ D) $8n^5 + 4n^3 + 10$

Multiply.

- 25) $(3x - 2)(x - 4)$ 25) _____
A) $x^2 + 8x - 14$ B) $3x^2 - 14x + 8$ C) $3x^2 - 15x + 8$ D) $x^2 - 14x - 15$

Answer Key

Testname: MAT-062 MODULE 2 PRACTICE

- 1) C
- 2) B
- 3) B
- 4) A
- 5) A
- 6) B
- 7) D
- 8) D
- 9) B
- 10) D
- 11) A
- 12) A
- 13) B
- 14) B
- 15) B
- 16) B
- 17) A
- 18) C
- 19) B
- 20) A
- 21) A
- 22) A
- 23) A
- 24) C
- 25) B