

Name _____

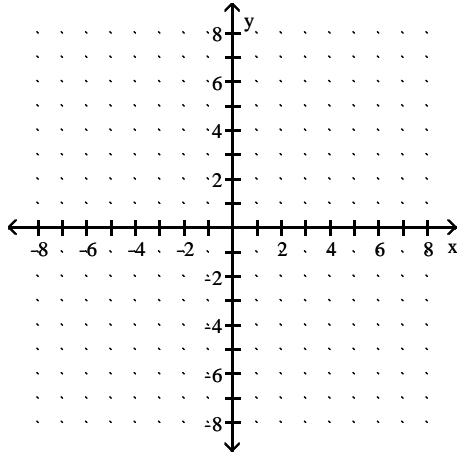
3 points each

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

Determine the solution to the system of linear equations graphically. If the system is dependent or inconsistent, so state.

1) $4x + 5y = 22$
 $-2x + 4y = 2$

1) _____



- A) (3, 2) B) (2, 3) C) dependent D) inconsistent

Find the solution to the system of equations by substitution.

2) $x + 3y = 3$
 $7x - 4y = -4$

2) _____

- A) (0, 0) B) (1, 0) C) (0, 1) D) (1, 1)

Solve the system of equations using the addition method.

3) $x + 5y = 38$
 $-6x + 4y = 44$

3) _____

- A) (-2, 8) B) (2, 9) C) (-3, 9) D) no solution

4) $5x + 4y = -3$
 $12y = -9 - 15x$

4) _____

- A) (5, 4) B) (0, 0)
 C) infinite number of solutions D) no solution

Simplify.

5) $(-4)^0$

5) _____

- A) 1 B) 4 C) -1 D) 0

Express the exercise as a system of linear equations, then find the solution. Use a calculator where appropriate.

- 6) A movie theater charges \$8.00 for adults and \$5.00 for children. If there were 40 people altogether and the theater collected \$272.00 at the end of the day, how many of them were adults? 6) _____
- A) 10 adults B) 16 adults C) 29 adults D) 24 adults

Multiply.

- 7) $(-3a^6b)(4.7a^7b^3)$ 7) _____
- A) $-14.1a^{13}b^4$ B) $-141a^{42}b^3$ C) $-14.1a^{42}b^3$ D) $-1.41a^{13}b^4$

Simplify.

- 8) $\left(\frac{xy^8}{-5z^3}\right)^2$ 8) _____
- A) $\frac{x^2y^{16}}{25z^6}$ B) $-\frac{xy^{16}}{25z^6}$ C) $\frac{x^2y^{10}}{25z^5}$ D) $\frac{xy^{16}}{5z^6}$

- 9) $(x^{-2}y^6)^{-4}$ 9) _____
- A) $\frac{x^8}{y^{24}}$ B) $\frac{x^{-6}}{y^2}$ C) $\frac{y^2}{x^{-6}}$ D) $\frac{1}{x^8y^{24}}$

Multiply.

- 10) $7y^2(-3y^2 + 6y - 3)$ 10) _____
- A) $4y^4 + 13y + 4$ B) $-21y^4 + 42y - 21$
C) $-21y^4 + 42y^3 - 21y^2$ D) $-21y^4 + 42y^2 - 21$

- 11) $(6x + 7)(4x - 3)$ 11) _____
- A) $10x^2 + 10x - 21$ B) $24x^2 + 10x - 21$ C) $24x^2 + 10x + 10$ D) $10x^2 + 10x + 10$

Multiply using a special product formula.

- 12) $(3 + m)(3 - m)$ 12) _____
- A) $9 - 6m - m^2$ B) $6 - m^2$ C) $9 - m^2$ D) $9 + 6m - m^2$

Multiply.

- 13) $(x + 11)(x^3 + 4x - 3)$ 13) _____
- A) $x^4 + 4x^2 - 3x + 11$ B) $x^3 + 15x^2 + 41x - 33$
C) $x^4 + 11x^3 + 4x^2 + 41x - 33$ D) $x^4 + 11x^3 + 4x^2 + 47x + 33$

Divide.

- 14) $\frac{6x^8 + 15x^4 - 15x^2}{3x^2}$ 14) _____
- A) $2x^6 - 5x^2 + 5$ B) $6x^6 + 15x^2 - 15$ C) $2x^8 + 5x^4 - 5x^2$ D) $2x^6 + 5x^2 - 5$

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

15) $\frac{x^2 + 17x + 72}{x + 8}$

15) _____

Find the solution to the system of equations by substitution.

16) $-3x - 8y = 28$
 $x - 7y = 10$

16) _____

Solve the system of equations using the addition method.

17) $2x + 8y = -12$
 $2x + 2y = 18$

17) _____

Multiply.

18) $\left(\frac{1}{5}x^4\right)\left(\frac{1}{2}x^7\right)$

18) _____

Multiply using a special product formula.

19) $(6x - 11y)^2$

19) _____

Subtract.

20) $(2x^6 + 12x^3 + 2) - (6x^6 + 19x^3 - 20)$

20) _____

Answer Key

Testname: MATH80CH5,6V1

- 1) A
- 2) C
- 3) A
- 4) C
- 5) A
- 6) D
- 7) A
- 8) A
- 9) A
- 10) C
- 11) B
- 12) C
- 13) C
- 14) D
- 15) $x + 9$
- 16) $(-4, -2)$
- 17) $(14, -5)$
- 18) $\frac{1}{10}x^{11}$
- 19) $36x^2 - 132xy + 121y^2$
- 20) $-4x^6 - 7x^3 + 22$