

COMPASS C Worksheet

Name _____

1. If $x = -2$ and $y = -3$, what is the value of the expression $4x^3 - 2xy$?

- A. 36 B. 20 C. -20 D. -36 E. -44

2. Which of the following expressions represents the product of four more than twice x and six less than x ?

- A. $x^2 - 4x - 12$ D. $2x^2 + 16x + 24$
 B. $2(x^2 - 4x - 12)$ E. $2x^2 - 16x - 24$
 C. $8x^2 - 48x$

3. A student earned scores of 85, 76, and 78 on three of four tests. What must the student score on the fourth test to have an average (arithmetic mean) of exactly 80?

- A. 79 B. 80 C. 81 D. 82 E. 83

4. Which of the following is an equation of the line that contains the points (2, 3) and (4, 6)?

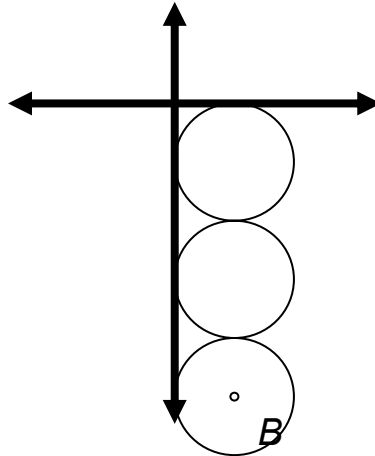
- A. $y = \frac{-3}{2}x$ D. $y = \frac{2}{3}x$
 B. $y = \frac{3}{2}x$ E. $y = \frac{2}{3}x + 6$
 C. $y = \frac{3}{2}x + 6$

5. For all $x \neq \pm 6$, $\frac{x^2 - x - 30}{x^2 - 36} = ?$

- A. $\frac{x+5}{x-6}$ D. $\frac{x+5}{x+6}$
 B. $\frac{x+6}{x-6}$ E. $\frac{x-5}{x-6}$
 C. $\frac{x-5}{x+6}$

6. Each circle has a diameter of 6. What is the location of point B the center of the bottom circle?

- A. (6 -15)
- B. (6, -18)
- C. (3, -15)
- D. (3, -18)
- E. (1, -3)



7. For all x , $(x^2 + 3x + 9)(x - 3)$ is

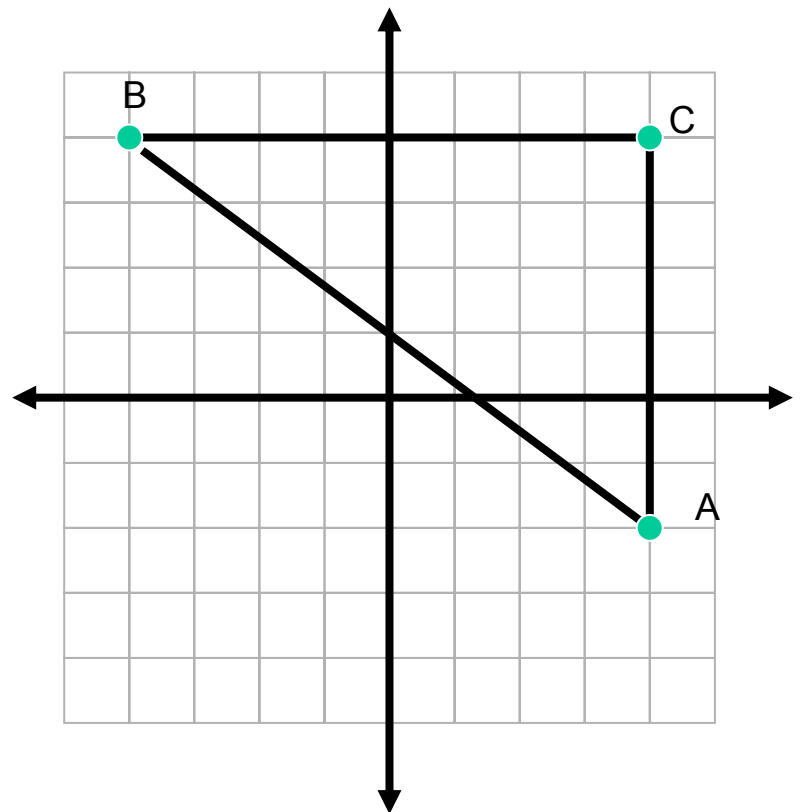
- A. $x^3 + 3x^2 - x - 3$
- B. $x^2 + 2x - 3$
- C. $3x - 3$
- D. $x^3 - 27$
- E. $x^3 - x^2 + 3x - 3$

8. If $A \circ B = 2A + 3B$, find $4 \circ 5$

- A. 20
- B. 23
- C. 17
- D. 9
- E. 5

9. What is the perimeter of $\triangle ABC$?

- A. 8
- B. 10
- C. 14
- D. 24
- E. 28



10. What is the value of $64^{2/3}$?

- A. 4
- B. 16
- C. 21.3
- D. 96
- E. $\frac{128}{3}$

Solutions: 1E 2B 3C 4B 5D 6C 7D 8B 9D 10B