Name: _____

8th Grade Weekly Math Review Week 35

Solve each problem. Show your work.

1. $(-9) \times 4 =$ _____

2. $5x + 7x - 5 =$ _____

3. A cone has a diameter 4 in and a height of 10 in. Find its volume. Use 3.14 for π.

   Answer: _____

4. Can a triangle with sides 3, 4 and 4 be a right triangle? Show why.

   Answer: _____

5. Solve the system: $4x + 2y = 2$ and $4x - 2y = 14$

   Solution: _____

6. Triangle ABC ~ triangle DEF. AB = 5, BC = 12, CA = 13 and DE = 10. Find EF and FD.

   Answer: _____

7. Two interior angles of a triangle are 31° and 52°. What is the exterior angle at the third vertex?

   Answer: _____

8. Triangle A(−1, −4), B(5, 2), C(2, −2) is rotated 180° about the origin. Give the coordinates of the image.

   A′B′C′: _____

9. Would a scatter plot of age of a car and its value show a positive, negative or no association?

   Answer: _____

10. Would a scatter plot of hours studied and quiz score show a positive, negative or no association?

    Answer: _____

11. A line of best fit for plant height (cm) after x days is y = -1.5x + 27. Predict y when x = 11.

    Answer: _____

12. A line of best fit for a car's value (thousands of $) after x years is y = 4x + 40. Predict y when x = 8.

    Answer: _____

Name: **ANSWER KEY**

8th Grade Weekly Math Review Week 35

Solve each problem. Show your work.

1. $(-9) \times 4 =$ −36

2. $5x + 7x - 5 =$ 12x − 5

3. A cone has a diameter 4 in and a height of 10 in. Find its volume. Use 3.14 for π.

   Answer: 41.9 cubic in

4. Can a triangle with sides 3, 4 and 4 be a right triangle? Show why.

   Answer: no, 25 ≠ 16

5. Solve the system: 4x + 2y = 2 and 4x − 2y = 14

   Solution: (2, −3)

6. Triangle ABC ~ triangle DEF. AB = 5, BC = 12, CA = 13 and DE = 10. Find EF and FD.

   Answer: EF = 24, FD = 26

7. Two interior angles of a triangle are 31° and 52°. What is the exterior angle at the third vertex?

   Answer: 83°

8. Triangle A(−1, −4), B(5, 2), C(2, −2) is rotated 180° about the origin. Give the coordinates of the image.

   A′B′C′: A′(1, 4), B′(−5, −2), C′(−2,

9. Would a scatter plot of age of a car and its value show a positive, negative or no association?

   Answer: negative

10. Would a scatter plot of hours studied and quiz score show a positive, negative or no association?

    Answer: positive

11. A line of best fit for plant height (cm) after x days is y = -1.5x + 27. Predict y when x = 11.

    Answer: 10.5

12. A line of best fit for a car's value (thousands of $) after x years is y = 4x + 40. Predict y when x = 8.

    Answer: 72