Name: _____

8th Grade Weekly Math Review Week 22

Solve each problem. Show your work.

1. $5x + 5 = 10$ x = _____

2. $9x + 5x - 9 =$ _____

3. Linear or nonlinear? $y = 3x + 2$

Answer: _____

4. Solve the system: $y = -3x - 9$ and $2x + y = -5$

Solution: _____

5. $(-2, 2)$ and $(1, 5)$ m = _____

6. Solve the system: $y = -2x + 10$ and $4x - y = 20$

Solution: _____

7. Solve the system: $y = 3x - 21$ and $x - 2y = 12$

Solution: _____

8. $(3^3)^2 =$ _____

9. Triangle A(0, −5), B(2, 2), C(0, −3) is reflected over the y-axis. Give the coordinates of the image.

A′B′C′: _____

10. Triangle A(2, 1), B(5, −6), C(−2, 1) is rotated 180° about the origin. Give the coordinates of the image.

A′B′C′: _____

11. Triangle A(−4, 6), B(3, −2), C(−3, 5) is rotated 180° about the origin. Give the coordinates of the image.

A′B′C′: _____

12. Triangle A(−6, −2), B(4, 4), C(4, −1) is reflected over the y-axis. Give the coordinates of the image.

A′B′C′: _____

Name: **ANSWER KEY**

8th Grade Weekly Math Review Week 22

Solve each problem. Show your work.

1. $5x + 5 = 10$ $x =$ 1

2. $9x + 5x - 9 =$ $14x - 9$

3. Linear or nonlinear? $y = 3x + 2$

Answer: linear

4. Solve the system: $y = -3x - 9$ and $2x + y = -5$

Solution: (−4, 3)

5. (−2, 2) and (1, 5) $m =$ 1

6. Solve the system: $y = -2x + 10$ and $4x - y = 20$

Solution: (5, 0)

7. Solve the system: $y = 3x - 21$ and $x - 2y = 12$

Solution: (6, −3)

8. $(3^3)^2 =$ 3^6

9. Triangle A(0, −5), B(2, 2), C(0, −3) is reflected over the y-axis. Give the coordinates of the image.

A′B′C′: A′(0, −5), B′(−2, 2), C′(0, −3)

10. Triangle A(2, 1), B(5, −6), C(−2, 1) is rotated 180° about the origin. Give the coordinates of the image.

A′B′C′: A′(−2, −1), B′(−5, 6), C′(2,

11. Triangle A(−4, 6), B(3, −2), C(−3, 5) is rotated 180° about the origin. Give the coordinates of the image.

A′B′C′: A′(4, −6), B′(−3, 2), C′(3, −5)

12. Triangle A(−6, −2), B(4, 4), C(4, −1) is reflected over the y-axis. Give the coordinates of the image.

A′B′C′: A′(6, −2), B′(−4, 4), C′(−4,