Name: _____

8th Grade Weekly Math Review Week 27

Solve each problem. Show your work.

1. $3(x + 8) =$ _____

2. $2x + 12 = 18 \quad x =$ _____

3. $5x + 3x + 9 = 57 \quad x =$ _____

4. Solve the system: $3x + 2y = -11$ and $2x - 2y = 6$

   Solution: _____

5. Linear or nonlinear? $y = 4/x$

   Answer: _____

6. Solve the system: $4x + 4y = 4$ and $2x - 4y = -22$

   Solution: _____

7. $f(x) = 3x + 3$. If $f(x) = 3$, $x =$ _____

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

   Answer: _____

9. The remote interior angles of a triangle are $4x°$ and $(3x + 10)°$. The exterior angle is $122°$. Find x.

   Answer: _____

10. The remote interior angles of a triangle are $4x°$ and $(2x + 10)°$. The exterior angle is $94°$. Find x.

    Answer: _____

11. The remote interior angles of a triangle are $3x°$ and $(3x + 10)°$. The exterior angle is $112°$. Find x.

    Answer: _____

12. The remote interior angles of a triangle are $4x°$ and $(2x + 10)°$. The exterior angle is $88°$. Find x.

    Answer: _____

Name: **ANSWER KEY**

8th Grade Weekly Math Review Week 27

Solve each problem. Show your work.

1. $3(x + 8) =$ 3x + 24

2. $2x + 12 = 18 \quad x =$ 3

3. $5x + 3x + 9 = 57 \quad x =$ 6

4. Solve the system: 3x + 2y = −11 and 2x − 2y = 6

   Solution: (−1, −4)

5. Linear or nonlinear? y = 4/x

   Answer: nonlinear

6. Solve the system: 4x + 4y = 4 and 2x − 4y = −22

   Solution: (−3, 4)

7. f(x) = 3x + 3. If f(x) = 3, x = 0

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

   Answer: EF = 24, FD = 26

9. The remote interior angles of a triangle are 4x° and (3x + 10)°. The exterior angle is 122°. Find x.

   Answer: x = 16

10. The remote interior angles of a triangle are 4x° and (2x + 10)°. The exterior angle is 94°. Find x.

    Answer: x = 14

11. The remote interior angles of a triangle are 3x° and (3x + 10)°. The exterior angle is 112°. Find x.

    Answer: x = 17

12. The remote interior angles of a triangle are 4x° and (2x + 10)°. The exterior angle is 88°. Find x.

    Answer: x = 13