Name: _____

8th Grade Weekly Math Review Week 34

Solve each problem. Show your work.

1. $6(x + 2) =$ _____

2. $4x + 7 = -13 \quad x =$ _____

3. $a^6 \div a^2 =$ _____

4. A TV screen is 16 in wide and 12 in tall. What is the diagonal length?

   Answer: _____

5. A 4 by 2 rectangle is dilated by a scale factor of 4. What is the area of the new rectangle?

   Answer: _____

6. $y = 1/2x - 9 =$ _____

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

   Solution: _____

8. Rectangle A is 10 by 16. Rectangle B is 15 by 24. What is the scale factor from A to B?

   Answer: _____

9. A line of best fit for test score after x hours of study is $y = 0.5x + 31$. Predict y when $x = 14$.

   Answer: _____

10. A line of best fit for a car's value (thousands of $) after x years is $y = -1.5x + 6$. Predict y when $x = 13$.

    Answer: _____

11. A line of best fit for test score after x hours of study is $y = 4x + 59$. Predict y when $x = 5$.

    Answer: _____

12. A line of best fit for a car's value (thousands of $) after x years is $y = 0.5x + 28$. Predict y when $x = 10$.

    Answer: _____

Name: **ANSWER KEY**

8th Grade Weekly Math Review Week 34

Solve each problem. Show your work.

1. $6(x + 2) =$ 6x + 12

2. $4x + 7 = -13 \quad x =$ −5

3. $a^6 \div a^2 =$ a^4

4. A TV screen is 16 in wide and 12 in tall. What is the diagonal length?

   Answer: 20 in

5. A 4 by 2 rectangle is dilated by a scale factor of 4. What is the area of the new rectangle?

   Answer: 128 sq units

6. $y = 1/2x - 9 =$ m = 1/2, b = −9

7. Solve the system: y = 2x − 10 and 4x − 2y = 20

   Solution: (4, −2)

8. Rectangle A is 10 by 16. Rectangle B is 15 by 24. What is the scale factor from A to B?

   Answer: 1 1/2

9. A line of best fit for test score after x hours of study is y = 0.5x + 31. Predict y when x = 14.

   Answer: 38

10. A line of best fit for a car's value (thousands of $) after x years is y = -1.5x + 6. Predict y when x = 13.

    Answer: −13.5

11. A line of best fit for test score after x hours of study is y = 4x + 59. Predict y when x = 5.

    Answer: 79

12. A line of best fit for a car's value (thousands of $) after x years is y = 0.5x + 28. Predict y when x = 10.

    Answer: 33