

Algebra I

Chapter 2 Review

Name: _____

Directions: Solve each equation practicing PROPER FORMATTING!

If appropriate, write All Real #s (identity) or no solution. (All answers should be EXACT!!)

1. $\frac{3y}{8} = -6$

2. $-2x - 5 = 9$

3. $\frac{1}{4}x + 10 = 12$

4. $\frac{3}{12} = \frac{11}{x}$

5. $45x - 9 - 12x = 33x + 15$

6. $-6(3x - 5) = 120$

7. $10x + 6 = 2(5x + 3)$

8. $\frac{1}{2} + \frac{2w}{4} = \frac{3}{4}$

9. $\frac{x+2}{3} = \frac{x-6}{4}$

10. $2x + 14 = 3(x + 5)$

11. $2 - 3x = -6 - 4x$

12. $4(2x - 1) = 3(3 + x) + 12$

Solve each equation for y.

13. $9x - 3y = 15$

14. $3x + 4y = 8$

15. $\frac{-x-2y}{3} = 6$

Use a conversion factor to change to the given units.

16. 6 ft 5 in. = _____ in.

17. 5 miles/hr = _____ ft/min

18. **Solve using a proportion.**

Eric is planning to bake approximately 305 cookies.

If 3 pounds of cookie dough make 96 cookies, about how many pounds of cookie dough will he need? Round to the nearest tenth.

Set up a proportion and solve. Round to the nearest tenth.

19. What percent of 99 is 72?

20. What is 16.5% of 33?

Set up an equation and solve. Round to the nearest tenth.

21. 68% of what number is 64.6?

22. What percent of 28 is 12.5?

23. The price of an outfit was originally \$130. The outfit was on sale for \$90.
Find the percent decrease. **Round to the nearest tenth.**

24. You bought 15 apples and 2 bags of caramel for \$16.60. The two bags of caramel cost \$5.35. How much does each apple cost?

Define a variable. _____

Write an equation.

Solve.

Answer in a sentence. _____

25. Sonia bought \$25 concert tickets online, and paid a total of \$267. To purchase the tickets online, there was a service fee of \$17. How many tickets did Sonia buy?

Define a variable. _____

Write an equation.

Solve.

Answer in a sentence. _____