

Name _____ Algebra Test Review: 1.7, 1.8 and chapter 2

Your test has 20 questions. Even though some questions are multiple choice you are required to show your work and use test-taking strategies (highlight, strike answers, etc.)

The test will include 1.7, 1.8, 2.3, 2.4, 2.5, 2.6, and coding stages 1 and 2.

Complete the following:

1. solve for a: $\frac{c}{a} = \frac{d}{b}$

2. Solve for y: $5y - 4x = 15$

3. solve for W: $WX - Y = Z$

4. Simplify: $-\frac{4}{3}(15x - 24)$

5. $3x^5 + 6x^5$

6. MODEL and use the distributive property:

13(102)

7. $5x - 2x - 4 = 11$

8. $5x + 12 = 5x + 7x - 4x$

9. $2x + 5 = 5x + 11$

10. $7n + 9 = 3 - 9n$

11. $3x + 6 - 4x = x + 10$

12. $4 + 3x = 7x + 12$

13. $4x - 9 = 2(2x + 4)$

14. $6(x + 3) = 3(2x + 6)$

15. The sum of 3 consecutive even integers is 360. Write an equation to find each integer

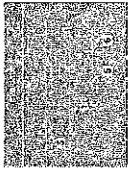
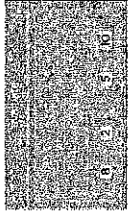
16. The length of a rectangle is 4 less than twice the width. The perimeter is 52 in. Write an equation to find the length and width

17. Alex sets up a tutoring business. He charges \$4 for coming to your house plus \$.50 per problem. He charged Brittany \$11.50 for a tutoring session. How many problems did he help her with? (write and solve an equation)

26. $\frac{x}{4} - \frac{2}{3} = \frac{1}{2}$

27. $6 + \frac{x}{4} = \frac{7}{2}$

18. Jonathon and Nathan need to go to Utica High. Jonathon leaves at 3:00 and he walks at a pace of 3.2 miles per hour. Nathan leaves at 3:30 and jogs at 4.8 miles per hour. When will Nathan catch Jonathon?



28. Write an expression to model each set of evaluation blocks. Then simplify.

19. Emily and Chloe are at Wendy's. Emily rides her bike north at a rate of 6 miles per hour. Chloe finishes her frosty an hour later and rides her bike south at a rate of 8 miles per hour. When will they be 20 miles apart?

29. This code will generate $a(n)$

- A. string
- B. image
- C. number



30. $-3(2x - 4) = 3 - 2(x + 6) + 8$

Matching

- 20. _____ $5 + (3 + 2) = (5 + 3) + 2$ A. inverse property of multiplication
- 21. _____ $5 + 3 + 2 = 5 + 2 + 3$ B. identity property of multiplication
- 22. _____ $\frac{1}{3}(3) = 1$ C. commutative property
- 23. _____ $5 + (-5) = 0$ D. associative property
- 24. _____ $6 + 0 = 6$ E. inverse property of addition
- 25. _____ $6(1) = 6$ F. Identity property of addition