

A2T Unit 1 Preview

Show all work on a separate sheet of paper.

Name Key  
Date \_\_\_\_\_ Per \_\_\_\_\_

1. Simplify.  $42 \div 2(-12 + 9)$  -63

2. Evaluate.  $3x^2 + 5x + 1$ , when  $x = -2$  3

3. Solve.  $3(y - 4) = -2y - 12$  0

4. Solve and graph.  $5(2h - 6) - 7(h + 7) > 4h$   $h < -79$

5. Solve for b.  $\frac{2x+3b}{9} = \frac{x-b}{2}$   $\frac{2x}{3}$

6. Simplify.  $9(2x + 4) - 2(3x - 1)$   $12x + 38$

Match each equation on the left with the property it illustrates on the right.

7.  $4 + (9 + 6) = (4 + 9) + 6$  B

A. Identity Property of Addition

8.  $x + 12 = 12 + x$  E

B. Associative Property

9.  $(3 + y) + 0 = 3 + y$  A

C. Distributive Property

10.  $x \cdot 1 = x$  D

D. Identity Property of Multiplication

11.  $5(x + y) = 5x + 5y$  C

E. Commutative Property

12. List all the perfect squares between 1 and 250

1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225

13. What is the smallest prime number? The smallest composite number?

2

4

14. List 4 factors of 24. List 4 multiples of 24.

1, 24 ; 2, 12 ; 3, 8 ; 4, 6

24, 48, 72, 96

15. Are both 7 and  $-\frac{1}{2}$  integers? Why or why not?

NO,  $-\frac{1}{2}$  is a rational number. An integer is a whole number that is positive negative or zero.

16. Are both 7 and  $-\frac{1}{2}$  rational numbers? Why or why not?

Yes, both numbers are fractions

17. Round 43.77301 to the nearest hundredth.

43.77