

MasterMath

Name _____

Date _____

The Distributive Property

1. Are these Equivalent Expressions?

$$y = (-6)(3 - 2x) \qquad y = 12x - 18$$

yes

2. Are these Equivalent Expressions?

$$4(3x - 6) = y \qquad y = 12x - 6$$

no

3. Are these Equivalent Expressions?

$$-2(6x - 2) + 4 = y \qquad y = 8 - 12x$$

yes

4. Are these Equivalent Expressions?

$$y = 7x - 22 \qquad -3(6 - 2x) - 4 + x = y$$

yes

5. What is the product of 6 and the coefficient in this expression?

$$y = 2x + 3$$

12

6. Combine the Like Terms to simplify this expression:

$$y = 3x - 4 + 2x + 8$$

$$y = 5x + 4$$

Write an algebraic expression that describes these situations; simplify your answer:

7. Four times the difference between z and 8, increased by the difference between 6 and z

$$3z - 26$$

8. 100 is the same as m reduced by 173

$$100 = m - 173$$

9. r fewer than 16 is 93

$$16 - r = 93$$

10. 284 equals the quotient of v and 373

$$284 = v \div 373$$

11. 143 less than k is 276 more than 3 times k

$$k - 143 = 3k + 276$$

12. Atiya rode her bike for 2.7 miles on Wednesday. On Thursday, she biked 6 times as far as on Wednesday. Write an algebraic expression to determine how many miles Atiya biked on Thursday (M)?

$$M = 6 * 2.7$$

13. A bee colony produced 4.68 pounds of honey, but bears ate 1.98 pounds of it. How much honey remains?

$$x = 4.68 - 1.98$$