

Name _____ Hour _____ Date _____

Properties of Real Numbers

Math 2

Identify the property used in each equation below. Your choices are listed at the bottom of this worksheet.

- | | |
|--|---|
| 1. $3 + (-2) = (-2) + 3$ | 16. $-1 \cdot (-13) = 13$ |
| 2. $(-3 + 2) + 1 = -3 + (2 + 1)$ | 17. $-a \cdot b = b \cdot (-a)$ |
| 3. $-5 + 0 = -5$ | 18. $(-2.5 \cdot y) \cdot (-4) = -2.5 \cdot (y \cdot (-4))$ |
| 4. $-6 + 6 = 0$ | 19. $12 \cdot x = x \cdot 12$ |
| 5. $-y + 0.7 = 0.7 + (-y)$ | 20. $0 \cdot (-41) = 0$ |
| 6. $8.3 + (-8.3) = 0$ | 21. $-13 \cdot (-1) = 13$ |
| 7. $(x + 9) + 2 = x + (9 + 2)$ | 22. $-5 \cdot (-6) = -6 \cdot (-5)$ |
| 8. $-8 + (-x) = -x + (-8)$ | 23. $(y \cdot 4) \cdot 9 = y \cdot (4 \cdot 9)$ |
| 9. $-2 + 0 = -2$ | 24. $-\frac{2}{5} \cdot 0 = 0$ |
| 10. $(x + 2) + 3 = x + (2 + 3)$ | 25. $(3x)y = 3(xy)$ |
| 11. $4 + 8 = 8 + 4$ | 26. $(-2 \cdot 5) \cdot 4 = -2 \cdot (5 \cdot 4)$ |
| 12. $-12 + 0 = -12$ | 27. $1 \cdot (ab) = ab$ |
| 13. $7 + (-7) = 0$ | 28. $0.25 \cdot (-4x) = [0.25 \cdot (-4)] \cdot x$ |
| 14. $-7 \cdot 0 = 0$ | 29. $15 \cdot (x - 2y) = 15x - 30y$ |
| 15. $b \cdot 1 = b$ | 30. $2100 = 100 \cdot (20 + 1)$ |
| 31. Another name for a number's opposite is its _____. | |
| 32. Another name for a number's reciprocal is its _____. | |

Properties List

Commutative Property of Addition

Commutative Property of Multiplication

Associative Property of Addition

Associative Property of Multiplication

Identity Property of Addition

Identity Property of Multiplication

Inverse Property of Addition

Property of Zero

Distributive Property

Property of -1