Share and Show Math Board

1. Use properties to find $4 \times 23 \times 25$.

$23 \times$ _____ $\times 25$ _____ Property of Multiplication

$23 \times ($ _____ $\times$ _____ $)$ _____ Property of Multiplication

$23 \times$ _____

_____

Use properties to find the sum or product.

2. $\frac{8}{9} + \frac{4}{9} + \frac{1}{9}$

3. 9×52

✓ **4.** $107 + 0 + 39 + 13$

Complete the equation, and tell which property you used.

5. $9 \times (30 + 0.7) = (9 \times$ _____ $) + (9 \times 0.7)$

✓ **6.** $0 +$ _____ $= 4.76$

Math Talk

MTR 5.1 Use patterns and structure.

Describe how you can use properties to solve problems more easily.

On Your Own

Use properties to find the sum or product.

7. $3 \times 3\frac{3}{8}$

8. $0.4 \times 0.6 \times 0.5$

9. $21 + 25 + 39 + 5$

Complete the equation, and tell which property you used.

10. $11 + (19 + 6) = (11 +$ _____ $) + 6$

11. $25 + 14 =$ _____ $+ 25$

12. **MTR** Show how you can use the Distributive Property to rewrite and find $(3.2 \times 0.6) + (3.2 \times 0.4)$.

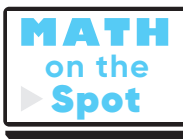**13.** Three friends' meals at a restaurant cost $13, $14, and $11. Use parentheses to write two different expressions to show how much the friends spent in all. Which property does your pair of expressions demonstrate?

_____

_____

14. **MTR** Mito is designing an aquarium for a doctor's office. He plans to buy 6 red blond guppies, 1 blue neon guppy, and 1 yellow guppy. The table shows the price list for the guppies. How much will the guppies for the aquarium cost?

_____

Fancy Guppy Prices	
Blue neon	$11
Red blond	$22
Sunrise	$18
Yellow	$19

15. Sylvia bought 8 tickets to a concert. Each ticket costs $18. To find the total cost in dollars, she added the product 8×10 to the product 8×8, for a total of 144. Which property did Sylvia use?

_____

16. Julie wrote $(15 - 6) - 3 = 15 - (6 - 3)$. Is Julie's equation sense or nonsense? Do you think the Associative Property works for subtraction? Explain.

MATH on the ▶ Spot

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_____

Show the Math

Demonstrate Your Thinking

17. Find the property that each equation shows.

$14 \times (4 \times 9) = (14 \times 4) \times 9$ ●

● Commutative Property of Multiplication

$1 \times 3 = 3 \times 1$ ●

● Associative Property of Multiplication

$\dfrac{1}{6} \times \dfrac{1}{3} = \dfrac{1}{3} \times \dfrac{1}{6}$ ●

● Identity Property of Multiplication