Name _____ Core ____ Date _____

3.3 Exercises

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Vocabulary and Concept Check

1. NUMBER SENSE Write an example of a sum of fractions. Show that the Commutative Property of Addition is true for the sum.

_____ _____

4. WHICH ONE DOESN'T BELONG? Which statement does *not* belong with the other three? Explain your reasoning.

$7 + (x + 4) = 7 + (4 + x)$

$(3 + b) + 2 = (b + 3) + 2$

$9 + (7 + w) = (9 + 7) + w$

$(4 + n) + 6 = (n + 4) + 6$

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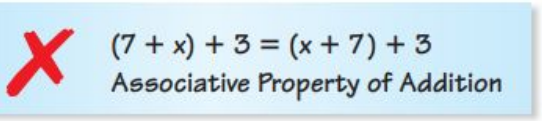
_____

_____

11. ERROR ANALYSIS Describe and correct the error in stating the property that the statement illustrates.



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Simplify the expression. Explain each step.

12. $6 + (5 + x)$

14. $6(2b)$

16. $3.2 + (x + 5.1)$

18. $9 \cdot c \cdot 4$

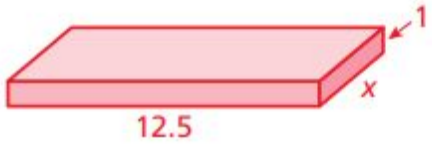
20. $\left(3k + 4\frac{1}{5}\right) + 8\frac{3}{5}$

22. $(3s) \cdot 8$

24. GEOMETRY The expression $12 + x + 4$ represents the perimeter of a triangle. Simplify the expression.

_____

26. STRUCTURE The volume of the rectangular prism is $12.5 \cdot x \cdot 1$.



a. Simplify the expression. _____

b. Match $x = 0.25$, 12.5, and 144 with the object. Explain.

A. siding for a house _____

B. ruler _____

C. square floor tile _____

34. HATS You and a friend sell hats at a fair booth. You sell 16 hats on the first shift and 21 hats on the third shift. Your friend sells x hats on the second shift.

a. Write an expression for the number of hats sold. _____

b. The expression $37(14) + 10x$ represents the amount that you both earned. How can you tell that your friend was selling the hats for a discounted price?

_____

_____

_____

_____

c. Reasoning You earned more money than your friend. What can you say about the value of x?

_____

_____

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