



## Additional Practice 13-2

### Write Numerical Expressions

#### Another Look!

Cole is  $11\frac{1}{2}$  years old. Uncle Frank is 4 times as old as Cole. Write an expression to show how you could calculate Uncle Frank's age in 6 years.



You could use properties to write other expressions for Frank's age.

Uncle Frank's current age:

$$4 \times 11\frac{1}{2}$$

Uncle Frank's age in 6 years:

$$(4 \times 11\frac{1}{2}) + 6$$

The expression  $(4 \times 11\frac{1}{2}) + 6$  shows the calculations that will determine Uncle Frank's age in 6 years.

In 1–7, write a numerical expression for each calculation.

**Sample answers given.**

1. Multiply 16, 3, and 29, and then subtract 17.

$$(16 \times 3 \times 29) - 17$$

2. Add 13.2 and 0.9, and then divide by 0.6.

$$(13.2 + 0.9) \div 0.6$$

3. Subtract  $12\frac{1}{2}$  from the product of  $\frac{9}{10}$  and 180.

$$\left(\frac{9}{10} \times 180\right) - 12\frac{1}{2}$$

4. Add the quotient of 120 and 60 to the quotient of 72 and 9.

$$(120 \div 60) + (72 \div 9)$$

5. Multiply 71 by 8, and then add 379.

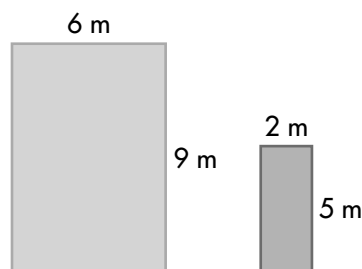
$$(71 \times 8) + 379$$

6. Find 3 times the difference of 7.25 and 4.5.

$$3 \times (7.25 - 4.5)$$

7. Write an expression to show the calculations you could use to determine how much greater the area of the larger rectangle is than the area of the smaller rectangle.

$$(6 \times 9) - (2 \times 5)$$



8. **Model with Math** Lola uses 44 beads to make a bracelet and 96 beads to make a necklace. Write an expression to show how you could calculate the total number of beads Lola used to make 13 bracelets and 8 necklaces.

**Sample answer:**

$$(13 \times 44) + (8 \times 96)$$

9. Bart works 36 hours a week and makes \$612. Charles works 34 hours a week and makes \$663. Who makes more per hour? How do you know?

**Charles; Sample explanation:** Bart earns  $\$612 \div 36 = \$17$  per hour; Charles earns  $\$663 \div 34 = \$19.50$  per hour.

10. Use a property to write an equivalent expression for  $12 \times (100 - 5)$ . Which property did you use?

**Sample answer:**

**$(12 \times 100) - (12 \times 5)$ ; Distributive Property**

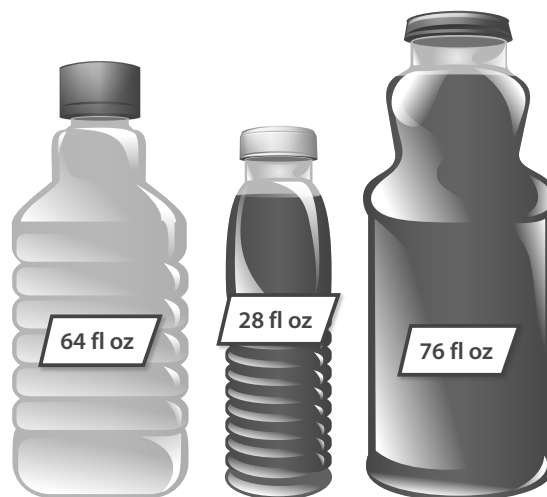
11. Doreen solved the following problem:

$$\frac{1}{6} \div 5 = \frac{1}{30}$$

Show how to use multiplication to check Doreen's answer.

$$\frac{1}{30} \times 5 = \frac{1}{30} \times \frac{5}{1} = \frac{5}{30} = \frac{1}{6}; \text{ it checks.}$$

12. **Higher Order Thinking** Stephen is combining all of the juice shown to make fruit punch. Does the expression  $(64 + 28 + 76) \div 6$  show how you could calculate the number of  $\frac{3}{4}$ -cup servings? Explain. **Yes; Divide the total amount of punch by the size of one serving. Since  $\frac{3}{4}$  cup =  $\frac{3}{4} \times 8$  fl oz = 6 fl oz, you can divide the total number of fluid ounces by 6.**



### Assessment Practice

13. Which expression represents the following calculation?

Divide 688 by 32, and then add 16.

- (A)  $(688 \div 32) + 16$
- (B)  $688 + (32 \div 16)$
- (C)  $(688 + 32) \div 16$
- (D)  $688 \div (32 + 16)$

14. Which is the first step in evaluating the expression?

$$(25 - 9) \div 8 \times 3$$

- (A) Multiply 8 and 3
- (B) Subtract 25 and 9
- (C) Divide 9 by 8
- (D) Multiply 9 and 3