



## 3-3 Additional Practice

Scan for  
Multimedia**Leveled Practice** In 1–3, use the order of operations to evaluate.

1.  $0.2^2 \div [7.9 - (4.1 + 1.8)]$

$$= 0.2^2 \div [7.9 - \boxed{\phantom{00}}]$$

$$= 0.2^2 \div \boxed{\phantom{00}}$$

$$= \boxed{\phantom{00}} \div \boxed{\phantom{00}}$$

$$= \boxed{\phantom{00}}$$

2.  $(14.7 + 9.3) \times \left(\frac{1}{2}\right)^2$

$$= \boxed{\phantom{00}} \times \left(\frac{1}{2}\right)^2$$

$$= \boxed{\phantom{00}} \times \boxed{\phantom{00}}$$

$$= \boxed{\phantom{00}}$$

3.  $12.3 + (6^2 - 11.8) - 1$

$$= 12.3 + (\boxed{\phantom{00}} - 11.8) - 1$$

$$= 12.3 + \boxed{\phantom{00}} - 1$$

$$= \boxed{\phantom{00}} - 1$$

$$= \boxed{\phantom{00}}$$

In 4–6, evaluate each expression.

4.  $5^2 - 9 \div 3$

5.  $8 + 6 - 2 \times 2 - 3^2$

6.  $4^2 \div [(3.2 \times 2) + 1.6]$

In 7–9, insert grouping symbols so that the expression has the given value.

7. Target value: 29

$$12 \times 2^2 - 18.4 + 0.6$$

8. Target value: 23

$$5^2 - 0.2 \times 8 + 12 \times \frac{1}{2}$$

9. Target value: 45

$$19 + 1^5 \div \frac{1}{2} + 5$$

10. Nikki's backyard is in the shape of a rectangle. The length is 27 feet. The width is one-third the length plus 4 feet. Write and evaluate an expression to find the area of Nikki's backyard.

11. **Make Sense and Persevere** Write a numerical expression, with at least three operations, that has the same value as  $(12 - 9)^2 \times (4 + 3)$ . Justify your answer. © MP.1

12. **Critique Reasoning** Ivy's basketball team scored 38 points in the first game of the season. In the next two games they scored a total of 77 points. For every point scored, \$0.50 is put in a jar to use for a party after the season. Ivy says that you can use the expression  $38 + 77 \times 0.5$  to find how much money is in the jar after the third game. Is she correct? Explain. © MP.3

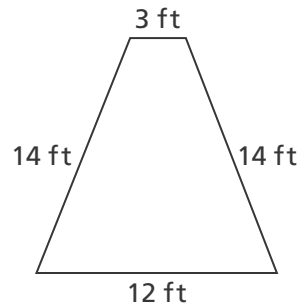
13. A printing error in a math book removed the brackets and parentheses from a numerical expression. Rewrite the expression  $3^2 + 7 \times 4 + 5$  with parentheses so that it is equivalent to 69.



14. Jessica bought a new computer for \$800. She put \$120 down and got a student discount of \$50. Her mother gave her  $\frac{1}{2}$  of the balance for her birthday. Use the numerical expression to find the amount that Jessica still owes for the computer.

$$[800 - (120 + 50)] \div 2$$

15. Luke needs a new fence around his garden, but the gate across the narrow end of the garden will not be replaced. Write and evaluate a numerical expression to find how many feet of fencing Luke needs.



16. Hailey walks at an average rate of 3.5 miles per hour. Last month, she walked 3 weeks at her regular rate for 6 hours per week. She walked 1 week at one-half her regular rate for 4 hours. Write and evaluate a numerical expression to find the total number of miles Hailey walked last month.

17. **Higher Order Thinking** James says that he used grouping symbols to find four equal values for  $2^3 + 3 \times 9 - 4^2$ . He wrote these expressions:

$$2^3 + 3 \times 9 - 4^2$$

$$(2^3 + 3) \times 9 - 4^2$$

$$2^3 + 3 \times (9 - 4)^2$$

$$2^3 + (3 \times 9 - 4^2)$$

Do you agree with James? Explain.

## © Assessment Practice

18. Match each number on the right to the equivalent expression on the left.

$$102.4 - [(2^3 \times 3) + 13.8] \div 7$$

5

$$\frac{1}{2} \times [(3^3 - 17) \div \frac{1}{6}] + 20$$

25

$$4 + [(1^6 \times 18) + 3]$$

97

$$[(7.21 \times 2) + 0.58] \div 3$$

50

19. Match each number on the right to the equivalent expression on the left.

$$10 - 1.8^2 \div (9 \times (\frac{2}{3})^2)$$

3.2

$$9 + [(7 - \frac{1}{6} \times 24) + 12] \div 3$$

4

$$[(7.3 + 3.6) - 4.7] + 1.8 - 2^2$$

9.19

$$[(11.2 + 8.8) \times \frac{1}{4}] - 1.8$$

14

