

Skill and Concept Check

- Identify the operation that should be done first in each expression.
 - $9 \div 3 + (14 - 7)$
 - $3 + 24 \div 3 \cdot 4$
- OPEN ENDED** Write an expression containing five numbers that is evaluated by first multiplying.
- FIND THE ERROR** Yutaka and Cynthia are evaluating $16 - 24 \div 6 \cdot 2$. Who is correct? Explain your reasoning.

Yutaka

$$\begin{aligned} 16 - 24 \div 6 \cdot 2 \\ = 16 - 24 \div 12 \\ = 16 - 2 \text{ or } 14 \end{aligned}$$

Cynthia

$$\begin{aligned} 16 - 24 \div 6 \cdot 2 \\ = 16 - 4 \cdot 2 \\ = 16 - 8 \text{ or } 8 \end{aligned}$$

GUIDED PRACTICE

Evaluate each expression.

- $11 - (3 \cdot 2)$
- $25 \div (9 - 4)$
- $8 - 4 + 3.7$
- $2 + 5 \cdot 5$
- $14 \div 2 \cdot 6$
- $8 \cdot 5 - 4 \cdot 3$
- 4×10^2
- $3.5 \times 5 + 6^2$
- $7 + 4(5.6 - 2) - 9$
- Evaluate $(16 \div 4)^3 - 6$.
- Find the value of $(6 + 8) \div (10 - 8)$.

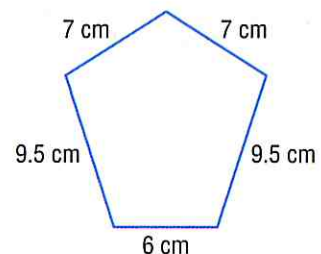
Practice and Applications

Evaluate each expression.

- $(1 + 8) \times 3$
- $10 - (3 + 4)$
- $(25 \div 5) + 8$
- $(11 - 2) \div 9$
- $3 \cdot 2 + 7$
- $15 \div 3 + 4$
- $12 + 6.6 \div 3$
- $18 - 3 \cdot 6$
- $8 - 7.2 + 5$
- $28 \div 7(5)$
- $(17 + 3) \div (4 + 1)$
- $(6 + 5) \cdot (8 - 6)$
- $21 \div 3 \times 2 - 4$
- $35 \div 5 + 56 \div 7$
- $2 \times 9 - 4^2$
- $24 \div 3 + 5^3$
- $7 + (8 - 7 + 2)^4$
- $(2 + 10)^2 \div 4$
- 6×10^2
- 18×10^3
- 1.95×10^2
- 3.7×10^4
- $6 + 2(9.4 - 1)$
- $3(4.5 + 7.2) - 5 \cdot 4$
- $72 \div 3 - 5(8.8 - 6) + 9$
- $9 \div 3 \cdot 14(10 - 8) - 60$

- GEOMETRY** The distance around a geometric figure is called its *perimeter*. Write a numerical expression to find the perimeter of the figure at the right. Then evaluate the expression.

- MARATHONS** On Mondays, Wednesdays, and Thursdays, Jacob trains for a marathon for 3.5 hours. On Tuesdays and Fridays, he trains for 2 hours, and on Saturdays, he trains for 4.5 hours. How many hours does Jacob train per week?



HOMEWORK HELP

For Exercises	See Examples
15–28	1, 2
29–36, 43–45	3, 4
37–40, 46–48	5
41–42, 50	6

Extra Practice
See pages 564, 596.