Practice

Properties

Name the property shown by each statement.

1.
$$55 + 6 = 6 + 55$$

2.
$$6 \cdot 7 = 7 \cdot 6$$

3.
$$(x + 3) + y = x + (3 + y)$$

4.
$$1 \cdot mp = mp$$

5.
$$9 + (5 + 35) = (9 + 5) + 35$$

6.
$$67 + 0 = 67$$

7.
$$7x \cdot 0 = 0$$

8.
$$4(3 \cdot z) = (4 \cdot 3)z$$

Find each sum or product mentally.

9.
$$18 + 17 + 22$$

10.
$$12 + 15 + 8 + 5$$

14.
$$14 + 25 + 16$$

ALGEBRA Simplify each expression.

15.
$$(m + 11) + 19$$

17.
$$19 + (v + 8)$$

16.
$$(9 \cdot b) \cdot 10$$

18.
$$(28 + 12) + x$$

20.
$$4 \cdot (r \cdot 5)$$

- **21. GEOMETRY** The volume of a box is given by $V = \ell \cdot w \cdot h$ where $\ell = \text{length}$, w = width, and h = height. Find the volume of a box if length is 25 cm, width is 13 cm, and height is 4 cm.
- **22. SCHOOL** In math class each assignment is worth 20 points. David got 17, 20, 19, and 13 points on his last four assignments. How many points did David score altogether?
- 23. True or false: Multiplying any number by one produces the original number. Explain.