

1-6

Skills Practice***Commutative and Associative Properties*****Evaluate each expression.**

1. $16 + 8 + 14 + 12$

2. $36 + 23 + 14 + 7$

3. $32 + 14 + 18 + 11$

4. $5 \cdot 3 \cdot 4 \cdot 3$

5. $2 \cdot 4 \cdot 5 \cdot 3$

6. $5 \cdot 7 \cdot 10 \cdot 4$

7. $1.7 + 0.8 + 1.3$

8. $1.6 + 0.9 + 2.4$

9. $4\frac{1}{2} + 6 + 5\frac{1}{2}$

Simplify each expression.

10. $2x + 5y + 9x$

11. $a + 9b + 6a$

12. $2p + 3q + 5p + 2q$

13. $r + 3s + 5r + s$

14. $5m^2 + 3m + m^2$

15. $6k^2 + 6k + k^2 + 9k$

16. $2a + 3(4 + a)$

17. $5(7 + 2g) + 3g$

Write an algebraic expression for each verbal expression. Then simplify, indicating the properties used.18. three times the sum of a and b increased by a 19. twice the sum of p and q increased by twice the sum of $2p$ and $3q$