Name _____ Date _____

Name the operation that would be performed first.

1. $18 - 5 + 12$ **2.** $5 \cdot 8 \div 4$ **3.** $27 \div (14 - 5)$

4. $36 \div 4 \cdot 3$ **5.** $8 + 10 \div 5 - 3$ **6.** $4 \cdot (7 - 3)^2$

Evaluate the expression.

7. $15 - 8 + 4$ **8.** $13 - 7 + 2$ **9.** $6 \cdot 4 \div 8$

10. $7 \cdot 4 - 3$ **11.** $32 - 9 \div 3$ **12.** $9 + 3 \cdot 4$

13. $6(8 - 3)$ **14.** $20 + 3^2$ **15.** $5^2 - 8 \cdot 2$

Evaluate the expression.

16. $6x + 3$ when $x = 2$ **17.** $4b - 1$ when $b = 5$ **18.** $5 + 2m^2$ when $m = 6$

19. $3y^2 - 2$ when $y = 1$ **20.** $5 \cdot 2a^3$ when $a = 3$ **21.** $4c^2 - 2c$ when $c = 5$

22. $10 + n^3$ when $n = 0.5$ **23.** $40 - \dfrac{32}{r}$ when $r = 4$ **24.** $x^2 \div 3 - 12$ when $x = 9$

Was the expression evaluated correctly using the order of operations? If not, find and correct the error.

25. $8 + 3 - 2 \cdot 5 = 8 + 3 - 10 = 11 - 10 = 1$

26. $(8 + 10) \div 6 - 3 = 18 \div 6 - 3 = 18 \div 3 = 6$

27. **Baseball** In your last three baseball games, you scored 4 runs, 1 run, and 1 run, respectively. The average number of runs you scored for the three games is given by the expression $\dfrac{4 + 1 + 1}{3}$. Find the average number of runs per game.

28. **Knitting** You are buying yarn for a knitting project. One skein of yarn in a basic color costs $3.99 and one skein of yarn in a fashion color costs $5.99. The total cost of buying 5 skeins of basic yarn and 2 skeins of fashion yarn is given by the expression $5 \cdot 3.99 + 2 \cdot 5.99$. Find the total cost of the yarn.

29. **Desk Lamp** You are buying a desk lamp for your study area. The lamp is $32 but is on sale for 75% of the original price. If you pay 5% sales tax, the expression $1.05(0.75 \cdot 32)$ represents the total cost of the lamp. Find the total cost of the lamp.

30. **Bowling** A local bowling alley charges $4.50 to play one game and $4 to rent one pair of shoes. The expression $4.5g + 4$ represents the total cost for you to play g games. How much would it cost you to bowl 4 games?