

PART I: Evaluate each expression.

1) $16 \div 8 \cdot 5$

2) $\frac{2}{3} - \frac{1}{4} + \frac{3}{2}$

3) $18 \div 6 + 4 \cdot 3$

4) $13 - 15 \div 5 + 9$

5) $\frac{2}{3} \cdot 3^2 - 5$

6) $(4^3 + 6^2) \div 0.5$

7) $14 \div \left[\frac{3}{4} (17 - 9)^2 \right]$

8) $\frac{4\sqrt{3(5^2 - 13)}}{-4 + 2}$

PART II: Evaluate each expression.

9) $3x^4 - 5$ when $x = 5$

10) $8m^3 \div 6$ when $m = 3$

11) $5c^2 - 2c$ when $c = -9$ (*Careful!!!)

12) $\frac{6(m-1)}{2m+3}$ when $m = 6$

13) $7x^2 + 2x$ when $x = \frac{1}{2}$

14) $\frac{5t^2 + 2}{t} - 3$ when $t = -2$ (*Careful!!!)

PART III: Application Problems

15) Three weeks ago, an art supply store started selling a pint kit for 75% of the original price. Now the kit is 15% off of the sale price. The expression

$$0.75 - 0.15(.075x)$$

represents the current price of the paint kit where x is the kit's original price (in dollars). Find the current price of the kit if it originally cost \$48.

16) One way a golfer can evaluate his or her playing is by using a number called a handicap. The first step to calculating your handicap is to calculate your handicap differential. The handicap differential is given by the expression

$$[(s - c) \cdot 113] \div l$$

where s is your game score, c is the course rating of the course you played, and l is the slope rating of the course. You played a course with a 72.1 course rating and a 129 slope rating. Your score was 90. What is the handicap differential for the game?