

Identifying Parts of Expressions Homework

1. Identify each term, coefficient, constant, and factor in $5x^2 + 3x + 12$.
 Factors: $5 \cdot x \cdot x$, $5 \cdot x^2$, $3 \cdot x$, $4 \cdot 3$

Terms: $5x^2$, $3x$, 12 3 terms

Coefficient: 5 , 3 Constant: 12

2. Write an expression with 4 terms, containing the coefficients 3, 6, and 9.

$$3x^2 + 6x + 9y + 8$$

Translations

Translate each verbal expression to an algebraic expression.

7. Eight more than 3 times a number

$$8 + 3x = 3x + 8 \leftarrow \text{more correct}$$

8. The difference of 10 and a number

$$10 - x$$

9. The quotient of 12 and a number

$$12 \div x \quad \frac{12}{x}$$

10. 15 less than twice a number

~~$$x - 2x - 15$$~~

$$2x - 15$$

11. Three-fourths the square of a number

$$\frac{3}{4}x^2$$

12. The product of 5 and the cube of a number increased by the difference of 6 and x

$$5x^3 + (6 - x)$$

13. Half the sum of x and y decreased by one-third of y

$$\frac{1}{2}(x+y) - \frac{1}{3}y \quad \frac{x+y}{2} - \frac{1}{3}y$$