

Name: _____ Date: _____

Identifying Parts and Translating Expressions

1. Identify each term, coefficient, constant, and factor in $5x^2 + 3x + 12$.

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

Translate each verbal expression to an algebraic expression.

3. Eight more than 3 times a number

4. The difference of 10 and a number

5. The quotient of 12 and a number

6. 15 less than twice a number

7. Three-fourths times the square of a number

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

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

10. The sum of a number and six, divided by eight

Translate each algebraic expression to a verbal expression.

11. $25 - x$

12. $x^4 - 12$

13. $3 + \frac{1}{2}x$

14. $8^2 - x$

15. $\frac{6-x}{13}$

16. $25(6+x)$

Name: Key

Date: _____

Identifying Parts and Translating Expressions

1. Identify each term, coefficient, constant, and factor in $5x^2 + 3x + 12$.

Terms: $5x^2, 3x, 12$ Coefficient: 5, 3 Constant: 12

Factors
 $5, x^2, 3, x$

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

Answers will vary $3x^3 + 6x^2 + 9x + 4$

Translate each verbal expression to an algebraic expression.

3. Eight more than 3 times a number

$$8 + 3x$$

4. The difference of 10 and a number

$$10 - n$$

5. The quotient of 12 and a number

$$\frac{12}{n}$$

6. 15 less than twice a number

$$2n - 15$$

7. Three-fourths times the square of a number

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

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

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

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

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

10. The sum of a number and six, divided by eight

$$\frac{x+6}{8}$$

Translate each algebraic expression to a verbal expression.

11. $25 - x$

A number less than 25

12. $x^4 - 12$

The difference of a number to the fourth power and 12.

13. $3 + \frac{1}{2}x$

The sum of 3 and half of a number

14. $8^2 - x$

The difference between eight squared and a number

15. $\frac{6-x}{13}$

The difference of six and x, divided by thirteen

16. $25(6+x)$

The product of twenty-five and the sum of six and a number.