

Basic Algebra 1.1

Translate words into algebraic expressions and equations

algebraic expression

variable

numerical expression

factor }
product }

quotient \div

sum $+$

difference $-$

equation $(\quad) = (\quad)$

activ: I have/who has (if time)

p. 4

Addition	Subtraction	Multiplication	Division
plus the sum of increased by more than added to the total of	minus the difference of decreased by less than fewer than subtracted from	times the product of multiplied by at of	divided by the quotient of the ratio of per

Equality

equals
is
is equivalent
to

is equal to
is the same as
is as much as
is identical to

Whiteboards

Write an algebraic expression for each verbal expression.

(Examples 1 & 2)

4. t more than s

5. the product of 7 and m

6. 11 decreased by the quotient of x and 2

$$11 - \frac{x}{2}$$

Write a verbal expression for each algebraic expression.

(Examples 5 & 6)

7. $\frac{7}{q}$

8. $3\ell - 9$

Write an equation for each sentence. (Examples 7 & 8)

9. A number m added to 6 equals 17.

$$6 + m = 17$$

10. Ten is the same as four times r minus 6.

Write a sentence for each equation. (*Examples 9 & 10*)

11. $5 + r = 15$

12. $\frac{4p}{3} = 12$

13. **Biology** The family of great white sharks has w different species. The blue shark family has nine times w plus three different species. Write an algebraic expression to represent the number of species in the blue shark family. (Example 4)

$$9 \cdot w + 3$$

$$9w + 3$$

Gem A

$$\begin{array}{l} 3 + 5 \cdot 5 - 9 = \\ 3 + 25 - 9 = 19 \end{array} \quad \begin{array}{l} (6+1) \cdot 9 - 0 = 0 \\ \text{D} \end{array}$$

$$9 + 5 \cdot 3 - 5$$

$$9 + 15 - 5 = 19$$

$$7 \cdot 9 - 0 = 63$$

$$2 + 8 \cdot (8 - 1) =$$

$$2 + 8 \cdot 7 = 58$$

$$8 + 8(1 - 2)$$

$$8 + 8(-1) = 0$$

$$6 + 7 \cdot 4 - 5 = 29$$

$$6 + 28 - 5 = 29$$

$$6 + 7 \cdot 5 - 4$$

$$6 + 35 - 4 = 37$$

$$7 + 6 \cdot 9 - 3 =$$

$$7 + 54 - 3 = 58$$

$$6 + 7 \cdot 9 - 3$$

$$6 + 63 - 3 = 66$$

S m a t o

$$8 - 5 = 3$$

$$8 +^{-}5 = 3$$

$$12 +^{-}5$$