Translating Verbal and Algebraic Phrases *Overview of problems*

Example Set: A

Translate the phrase into an algebraic expression

3 times a number plus 12

The product of two diffent numbers

7 times a number decreased by 2

The quotient of 15 and y

Example Set: B

Translate the phrase into an algebraic expression

The difference between three times a number and 8

16 more than $\frac{1}{3}$ of the sum of two numbers

11 less than a number divided by 6

Example Set: C

Translate the sentence into an equation or inequality

9 more than a number times 6 is 20

2 times the difference of a number and 4 is y

A number decreased by the sum of 7 and the square of another number is 100

The product of 2 and the sum of x and y is greater than the quotient of x and y

Translating Verbal and Algebraic Phrases *Overview of problems- KEY*

Example Set: A

Translate the phrase into an algebraic expression

3 times a number plus 12 $= 3x + 12$

The product of two diffent numbers $= xy$

7 times a number decreased by 2 $= 7x - 2$

The quotient of 15 and $y = \frac{15}{y}$

Example Set: B

Translate the phrase into an algebraic expression

The difference between three times a number and 8

$= 3x - 8$

16 more than $\frac{1}{3}$ of the sum of two numbers

$= \frac{1}{3}(x + y) + 16$

11 less than a number divided by 6

$= \frac{x}{6} - 11$

Example Set: C

Translate the sentence into an equation or inequality

9 more than a number times 6 is 20

$6x + 9 = 20$

2 times the difference of a number and 4 is y

$2(x - 4) = y$

A number decreased by the sum of 7 and the square of another number is 100

$x - (7 + y^2) = 100$

The product of 2 and the sum of x and y is greater than the quotient of x and y

$$2(x+y) > \frac{x}{y}$$