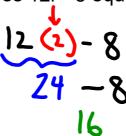


Ex)In the expression 12r - 8,

- 8 is the constant
- 12 is the coefficient
- r is the variable

If r = 2 then what does 12r - 8 equal?



Recall

Coefficient--> is the # in front of the letter (It is being multiplied)

Variable--> is a letter that represents a number that changes

Constant --> a number that is alone

either added or subtracted

Ex) 3-5x

Coeff: -5

Var: x

constant: 3

Remember if there is no # in front of a letter it is understood to be 1

Ex) m + 13

coeff: 1

var: m

Constant--> 13

Review

Variables, Constants & Coefficients



Ex) There will always be 7 days in a week,



A <u>variable</u> is a value that changes. (Letter)

Ex 1) The number of students present in grade 7 class can change from day to day, or

Ex 2) the number of days it rains in one week changes.

- a letter that represent the unknown value

Ex 1) Let p represents the number of students absent from school today.

Ex 2) Let a represent the teacher's age.



A coefficient is a number in front of the variable represents repeated addition

Repeated Addition is when you write the variable being added to itself.

Example) 3c = c + c + c

$$5\mathbf{w} = \mathbf{w} + \mathbf{w} + \mathbf{w} + \mathbf{w} + \mathbf{w}$$

Review

Often we translate phrases into expressions in math.

**Algebraic expression contains a variable and an operation.

There are certain words that we associate with the different operations:

Addition Addition	Subtraction	Multiplication	Division
sum plus increased by	difference minus decreased by reduced by	product times double, twice of triple	quotient divided by

Review

When using variables, you do not always have to include the times sign, it is assumed to be there.

Ex 1) 6n means 6 x n

Ex 2) 12t means 12 x t.

You can simply write the number followed by the variable. (Note: you can not write the variable first, without the times sign. You can not write b4, it has to written as 4b or b x 4).

^{Ex1)}7 - 2r

Coefficient: ____

Variable: _____

Constant: ____

16 + k

Coefficient: _____

Variable: ____

Constant: _____

You try



Always state what your variable represents

- 1. Translate the following it to an algebraic expressions:
- (a) a number reduced by 20

$$n-20$$

(b) 7 more than a number

(c) the product of 3 and a number

(d) The sum of a number and 50

add
$$n+50$$

(e) 6 times a number reduced by 9

2. Write the following algebraic expressions as words:

(a)
$$4r + 7$$

(b) 10m

(c) J/6

(d) 6 - h

Class/Homework



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Page 18 #1(a,b,c,d)

#2 Check Page 346 answers

#3(a,b,c,d) (section 1.3 page 18)

#4(a,b)

#5(a,b,c,d,e) define your variable

# 6(a,b) define your variable

Try 7(a,b,c)
```