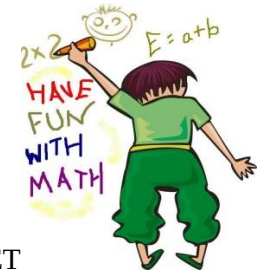
NAME: _____



ALGEBRA REVIEW SHEET

Grade 7

SECTION A

Answer the following questions in the space provided

1. Simplify the following:

a) $-3m-9m+5m-10m$

b) $-2-3h+\frac{3}{2}h-\frac{4}{3}$

c) $-2h+3n-4h+3h-4n$

d) $\frac{3}{2}m-\frac{1}{6}n-\frac{3}{2}n+\frac{2}{3}m$

e) $\frac{4m^2}{6b}\div\frac{2m^7}{3b^8}$

f) $\frac{5}{2a}\times\frac{3a}{2}\times\frac{4a^2}{2}$

g) $-3m^2(4-m)$

h) $\frac{4m}{3}\left(-9+\frac{1}{2}m^2\right)$

i) $-2(-4m-1)+3(-m+5)$

j) $\frac{2}{3}m(6m-3m^2)+3\left(-6m^2-\frac{4}{3}\right)$

k) $d \times 2d - 3d - d \times d - d$

l) $-3x^2+2x+2x^2-5x^3-7x$

m) In the following expression: $8+2x-\frac{3}{2}x^2$

a) How many terms are there? _____

b) What is the coefficient of x^2? _____

c) What is the constant term? _____

2. Write expressions for the following:
   a. -2 added to the square of h

   b. Half q is added to twice the square of half m

   c. *The quotient of* -3 *and* x *is* **less than** *the product of* m *and* $-2x$

d. *The sum of 3 consecutive numbers is subtracted from 5*

SECTION B

Solve the following equations for the unknown variable.

a) $-2 = -m - 14$

b) $4(2w - 3) + 4 = -16$

c) $\frac{-3(n-6)}{3} = 4$

d) $4y - 2(y + 1) = -5$

SECTION C:

Complete the following showing all work where possible.

1. Given that h = $\frac{3}{2} + m - p^3$, find the value of :

a) h when m = -4 and p = 2

b) h when m = 10 and p = -1

2. Given that G = -y+2(m- 3), find the value of:

a) G when y = 2 and m = $\frac{1}{2}$

b) G when y = -5 and m = -2

3) Mary spent one fifth of her allowance to buy a dress for the Christmas party. She purchased a party ticket which cost twice the amount she paid for the dress. If spent a total of $4000 to buy the dress and ticket:

a) Write an algebraic equation to represent the information given

c) What was the cost of the dress?

d) How much was her allowance?

4) Three consecutive even numbers have a sum of 936. Find the three numbers.