Substitution and formulas 1b   name..

1) If p = -4 , q = 5 and r = 10
find the value of

a) $pq + r$

b) $\dfrac{r^2}{q}$

c) $\dfrac{5r + 4q}{p}$

d) $p^2 + q^2 + r^2$

2) The general term of a number pattern is given by
$T_n = 2n - 5$
Find

a) the first 4 terms

b) the 10th term

c) the 50th term

3) Find the general term of the number pattern
4 , 7 , 10 , 13 ....

$T_n =$

4) The formula for the area of a trapezium is

$A = \dfrac{1}{2} h(a + b)$

Find the area if h = 6 cm , a = 3 cm and b = 4 cm.

5) Write an expression for

a) the sum of g and k^2

b) the product of 6y and a

c) the average of v, w , x , y , and z

d) half of 8k

e) 3 times the sum of 5a and 8

6) Given f(x) = 2x + 3 and
g(x) = x^2 + 1   find

a) f(4)

b) g(5)

c) f(2)

d) g(a)

e) f(x) + g(x)

7) Construct a formula for

a) the number of minutes (M) in H hours
M =

b) the average speed (S) of a car travelling D km in H hours.
S =

8) Write an equation linking x and y

a)

x	0	1	2	3
y	2	7	12	17

y =

b)

x	0	1	2	3
y	3	4	5	6

y =