Devi Balika Vidyalaya - Colombo

First Term Test - 2014

Mathematics

Grade 8 **Time : 1 ½ hrs.**

- Answer all question in the given paper itself.

01. Write the general term of the number pattern
5 , 8 , 11 , 14 .....

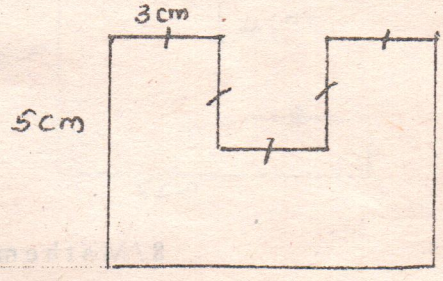
02. Write the 10^{th} triangular number

03. Simplify.
$3(2x + 1) + 3x - 8$

04. Write two features of an adjacent angle.

05. Factorise.
$6px - 2py + 8pz$

06. Find the perimeter of the figure given below.



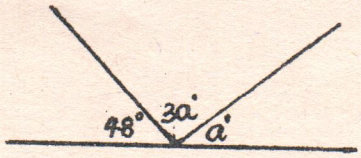
07. i) Write the complement of 72^0

ii) Write the supplement of 89^0

08. Simplify $(-4.7) - (-5.8)$

09. Write two characteristics of a regular tetrahedron.

10. Find the value of a^0



11. Simplify. $1\frac{3}{5} - \frac{2}{7}$

12. Write the name of the platonic solid which has 8 faces.

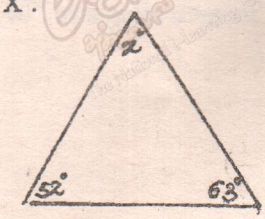
13. Simplify: $(-8) \times (+3) \times (-2)$

14. Write the first two terms of the number pattern $3n - 4$

15. Express in word. 432 568 000 002

16. Express 13^{th} square number using two square numbers.

17. Find the value of X^0.



18. Simplify (-4) – (+6)

19. Express 1035 ml in litres.

20. Write the name of the locus of a point which is moving with a constant distance from a fixe point. Draw a sketch diagram of it.

Part - II

01) a) Factorise $9a - 12$ (2 marks)

b) Simplify

i) $6p - 3q + 4q - 9p$ (2 marks)

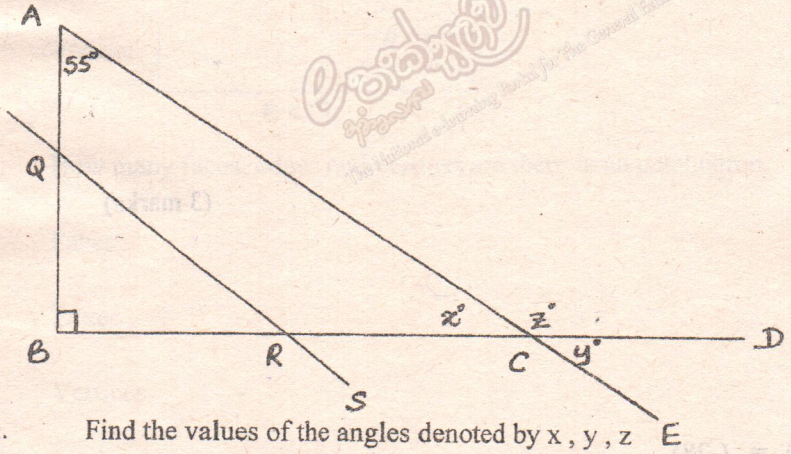
ii) $(a - 2b) - (3a + b)$ (2 marks)

c) When $x = 2$, $y = -1$ find the values of the following expressions.

i. $2x^2 - 3xy$ (3 marks)

ii. $x^3 + 2y^2$ (3 marks)

(02) P



i. Find the values of the angles denoted by x , y , z (6 marks)

ii. Name two pairs of corresponding angles (2 marks)

iii. Name a pair of allied angles (1 mark)

iv. Name a pair of alternate angles (1 mark)

v. Name a pair of supplementary angles (1 mark)

vi. Name a pair of complementary angles (1 mark)

(03) a) Simplify (-2) – (-8) using a number line (3 marks)

b) Simplify

i. $(-5\frac{1}{3}) + (-2\frac{1}{4}) + 3$ (3 marks)

ii. $\frac{(-9)X(+8)}{36}$ (3 marks)

iii. $\frac{(+12)\ X\ (\quad)}{(-3)} = (-28)$ (3 marks)

(04) i. Find the general term of the number sequence
3 , 7 , 11 , 15 , ... (3 marks)

16

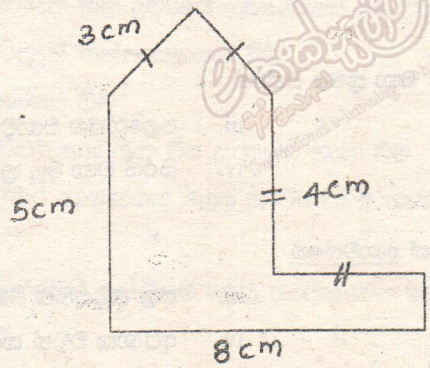
ii. Find the 12^{th} term of the above number sequence. (2 marks)

iii. Find the first three terms of the number sequence $3 - 2n$ (3 marks)

iv. Which even number is 928 ? (2 marks)

v. Find the 55^{th} odd number (2 marks)

(05) a) Find the perimeter of the given figure. (4 marks)



b) i. How many faces, edges and vertices are there in an octahedron. (6 marks)

Faces -

Edges -

Vertices -

ii. There are 8 edges and 6 faces in a certain solid object. Find the number of vertices of it.

(2 marks)

17