



Provincial Department of Education Northern Province



Monthly Examination

Time :- 1 Hour

Grade - 9

Maths

July - 2022

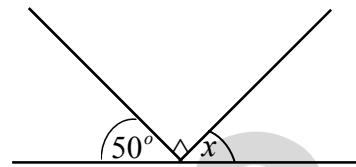
Part - I

01) Simplify :- $3a + 5b - a$

02) If $x = 5, y = -3$ Find the value of $x + y$

03) Factorize :- $3m + 9$

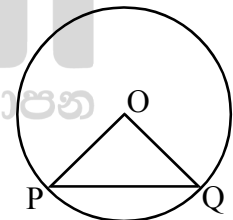
04) Find the value of x in the given figure.



05) Simplify by removing brackets.

$$5(x + y) + 3(x - y)$$

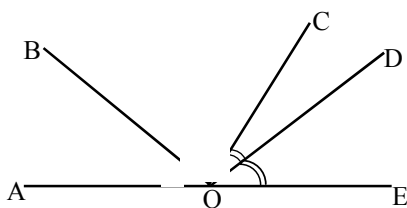
06) P, Q are the points on the circle which center is O such that $OP = OQ$, Give the type of the triangle PQO based on its' sides.



07) find the value of $35^2 - 5^2$ Using the knowledge of factorization.

08) If $x = 2, y = (-3)$ Find the value of $x^2 - 2xy$

09)



$\hat{AOB} = \hat{BOC}, \hat{COD} = \hat{DOE}$ in the above figure find the value of \hat{BOD}

10) Factorise $x^2 - x - 20$

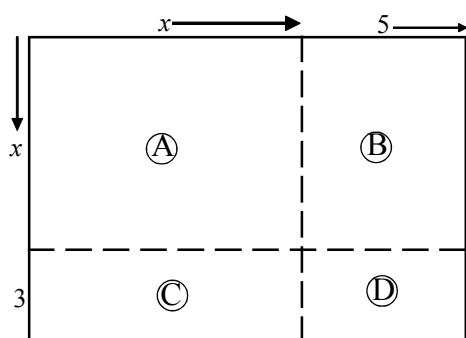
(10x5 = 50 Marks)

Part - II

- 01) The length of a square shaped flower bed is x . One side of this land is extended by 5 units and the other side is extended by 3 units as shown in the figure given below.

Answer the following questions to get expression to find the area of the land in relation to x .

i) Find the area of A?



..... (5 Marks)

ii) Find the area of B?

..... (5 Marks)

iii) Find the area of C?

..... (5 Marks)

iv) Find the area of D?

..... (5 Marks)

v) Find the total area of this land?

..... (5 Marks)

- 02) i) Simplify:- $5p + 2q + 2p - 2q$ (5 Marks)

ii) Factorize:- $xy + xz + 3y + 3z$ (5 Marks)

iii) Factorize:- $m^2 - m - 56$ (5 Marks)

iv) Factorize:- $2x^2 - 50$ (5 Marks)

v) If $x = -2, y = \frac{1}{3}$ Find the value of $2x + 3y$ (5 Marks)