Class 8th
Term II 2018
MATH

Series-B

Time: 2:30 Hrs.

Max. Marks 40

Section (A) Long Answer Type Questions   3Q × 5M = 15 Marks

Q.No.1   Show that; $(9p - 5q)^2 = (9p + 5q)^2 - 180pq$

Or

Evaluate the following using $(x + a)(x + b) = x^2 + (a + b)x + ab$
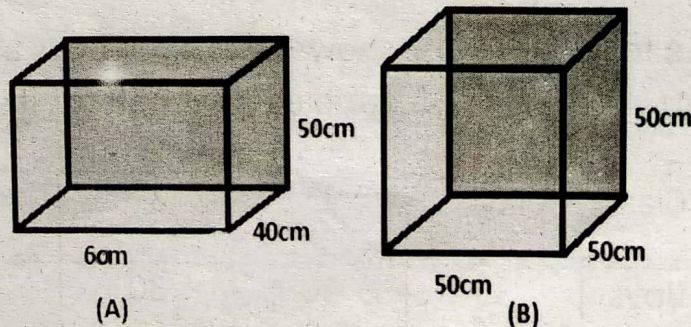
a) 9.7×9.8

b) 49×53

Q.No.2.   A rectangular paper of width $14cm$ is rolled along its width, and a cylinder of radius $20cm$ is formed. Find the volume of the cylinder.
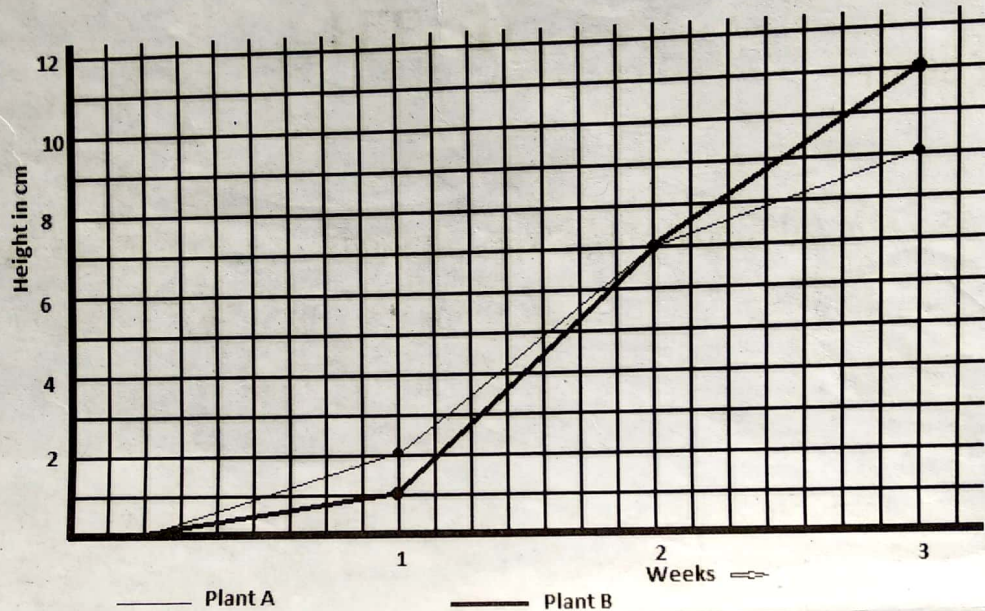
Or

Which cuboidal box needs more material to make and by how much?

50cm

50cm

40cm

6cm

50cm

50cm

(A)

(B)

Q.No.3. For an experiment in Botany, two different plants, plant A and plant B were grown under similar conditions. Their heights were measured at the end of each week for three consecutive weeks. The result is shown by the following graph. Read the graph carefully and answer the questions given at the end.

Plant A ——— Plant B ———

(a) What was the height of plant A after (I) 2 Weeks (II) 3 Weeks
(b) How much did plant A grow during third week?
(c) During which week did plant A grow most?
(d) During which week did plant B grow most?
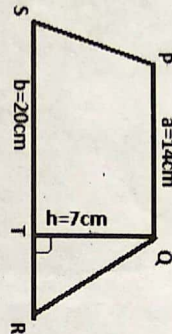(e) How much did plant B grow during 2nd week?

Or

The following table shows the roll of boys and girls in primary school Turtuk Leh. Draw a double Bar Graph for it.

Class	K.G.	1st	2nd	3rd	4th	5th
Boys	35	30	30	22	25	30
Girls	25	26	25	22	20	20

Section (B) Short Answer Type   4Q × 3M = 12 Marks

Q.No.4.   Add; $2x(z - x - y)$ and $2y(z - y - x)$

Q.No.5.   Calculate the area of given trapezium PQRS

Q.No.6.   Factorise; $15pq + 15 + 9q + 25p$

Q.No.7.   Divide: $(7y^2 + 14y)$ by $(y + 2)$

Section (C) Very Short Answer Type Questions 4Q × 2M = 8 Marks

Q.No.8.   Construct two different trinomials using x or y as variables.

Q.No.9.   Factorise 90 into prime factors.

Q.No.10.   Define Pie-Graph (Circular Graph)

Q.No.11.   Draw a line passing through the points $A(2,3)$ and $B(3,2)$

Section (D) 05 × 1M = 05 Marks

Q.No.12.   **Do as directed:**

(I) Give an example of a monomial containing two variables.

(II) Volume of cylinder is calculated by using formula ....

(Fill in the blanks)

(III) The Highest common factor in $2y, 22y$ is ....

(Choose correct one)

a) y

b)   22

c)   2

d) $2y$

(IV) $0.45 \times 10^3 =$ ......

(Choose correct one)

a)   450

b)   4500

c)   45000

d)   45

(V) The time taken for a journey and the distance travelled in a uniform speed is Inverse Proportion.   (True/False)