

GREENLAWNS SCHOOL WORLI  
Final Examination - 2017  
MATHEMATICS

Std: VII

Marks: (80)

Date:

Time: 1 ½ hr

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Q1a. If **a: b=5:4** and **b: c = 3:7**. Find **a: b: c** (3)

b. A train 200 m long passes a railway platform 300m long in 15 sec.  
How long will it take to pass the next platform which is 280m long? (3)

c. Simplify:  $\left(x + \frac{2x}{3}\right)\left(x + \frac{5x}{6}\right)\left(x + \frac{7x}{11}\right)$  (4)

Q2a. The base and the height of a triangle are in the ratio 2:5. If the area of the triangle is 125 sqcm. Find its base and the height. (3)

b. What principal will yield an interest of ₹160 for 1 ¼ yrs, the rate given is  $3\frac{1}{3}\%$ . (3)

c. Find the arithmetic mean of the data given below (2)

x	20	22	24	26	28	30
f	2	5	10	7	4	2

d. Find the total surface area of a cuboid where length is 25cm, breadth is 20cm, and height is 12cm. (2)

Q3a. The vertical angle of an isosceles triangle is  $15^\circ$  more than each of its base angle. Find each angle of the triangle. (3)

b. Manish had some money. He gave one fourth of it to his friend Mohit and still has ₹144 left with him. Find how much money he had in the beginning. (3)

c. Find the third proportion to 12 and 30. (2)

d. Rohan runs 200m in 25secs. Find the distance run by him in 5 sec. (2)

Q4a. What sum of money will amount to ₹660 at 5% in 5 years? (3)

b. Find the area of the four walls of a room whose dimensions are 3m, 4.5m, 8m. Find the cost of distemperring the walls at the rate of ₹30 per sq. m (3)

c. Draw a pie chart for the given data (4)

Mode of commuting	Bus	Bicycle	Taxi	On foot	Train	Car
No. of children	60	20	15	50	25	30

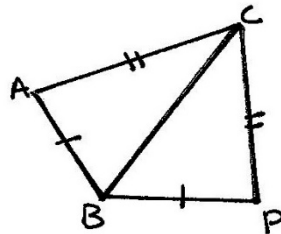
Q5a. The area of a square field is 576sqm. Find the cost of fixing a fence of the field at the rate of ₹3.20 per meter. (3)

b. The sum of three numbers in the ratio **3:8:7** is 9000. Find the numbers. (3)

c. Anil is 25 years older than his son. After 15 years, he will be twice as old as his son. Find their present ages. (4)

Q6a. A driver travelled the distance of 85km in 1hr40mins. Find his speed. If he drives with the same speed how much time will he take to cover 102km. (3)

b. In the adjoining figure prove that  $\triangle ABC \cong \triangle PBC$ ,  $\angle CAB = \angle CPB$  (3)



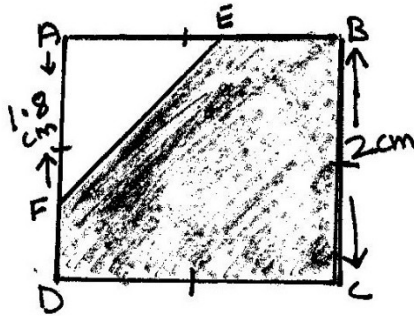
c. Find the fourth proportional of 3, 4 and 18. (2)

d. Mark the following points on the graph paper (2)

- i. (3,4)
- ii. (-3,2)
- iii. (-4,-6)
- iv. (4,-3)

Q7a. Find simple interest and amount on ₹1250 from 17<sup>th</sup> March 2001 to 10<sup>th</sup> September 2001 at 6% per annum. (3)

b. Given below is the square ABCD. Find the area of the shaded part in the figure given below. (3)



c. Construct a triangle XYZ such that  $XY=YZ = 7\text{cm}$ , and  $\angle Y = 60^\circ$ . Construct the incircle to the triangle. (4)

Q8a. A racing car covers 2280 km in 6hrs20 mins. Find the speed in m/sec. (2)

b. A shopkeeper sold radio sets in the first six months of the year as follows

Month	Jan	Feb	Mar	Apr	May	Jun
No. of radio sets.	110	80	100	90	120	60

Represent the data as a line graph. (3)

c. Bricks of size 20cmx10cmx8cm are used to build a wall whose length, breadth and height are 12m, 30cm, 3.5m respectively. How many bricks will be required for the wall? (3)

d. Solve:  $\frac{4a}{5} + 7 = 11$  (2)

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