GREENLAWNS SCHOOL, WORLI
Terminal Examination 2017
MATHEMATICS

Std: VII | Marks: [80]
Date: 20/9/17 | Time: 1 ½ hrs

QUESTION1

a. If **a: b** = **5:4** and **b: c**= **3:7** find **a: b: c** [3]

b. 6 labourers can complete tiling of a roof of a house in 18 days. How many labourers should be employed to complete that work in 12 days? [3]

c. The vertical angle of an isosceles triangle is 24^0 more than each of its base angle. Find its each angle. [4]

QUESTION2

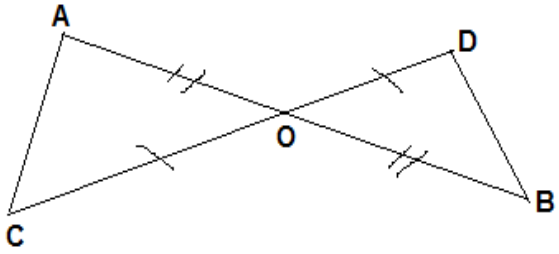
a. $\boldsymbol{V = \frac{\pi r^2 h}{3}}$, find r if V =2200cm^3, h= 21cm $\pi = \frac{22}{7}$ [3]

b. The average monthly earning of four earning members in Mehta's family is `18564.50. When Mehta's son started earning, the average earning of his family falls to `17821.60. How much does Mehta's son earn? [3]

c. Find the number of bricks to be laid on a square footpath of side 18m, if the length and breadth of each brick is 5cm and 3cm respectively. [4]

QUESTION3

a. In the adjoining figure prove that AC = BD [2]



b. Mrs Singh bought **7 ½** litres of milk. Out of this milk $\mathbf{5\frac{3}{4}}$ litres were consumed. How much milk is left with her? [2]

c. Simplify: **37.6+72.85 - 58.678 - 6.09** [2]

d. Ajay can paint a bungalow in 15 days while Vijay can paint the same bungalow in 18 days. Both begin their work together, but Vijay leaves after 6 days. How many days will Ajay take to finish the painting? [4]

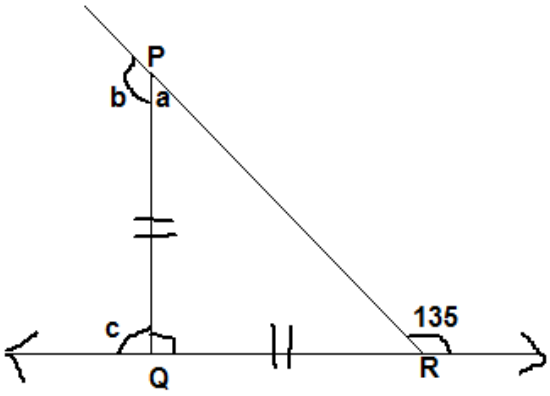
QUESTION4

a. Simplify: $\boldsymbol{3x^2 + 7 - \left(4x^2 + 3x^2y + 3 - \overline{2x^2y + 2}\right)}$ [2]

b. Express $\frac{5}{6}$ as recurring decimal. [2]

c. Find the mean proportion between 4 and 36. [2]

d. In the given figure find the marked angles a, b, c [4]



QUESTION5

a. The total sum of certain numbers is 3250 and their average is **32.50**
How many numbers are there? [2]

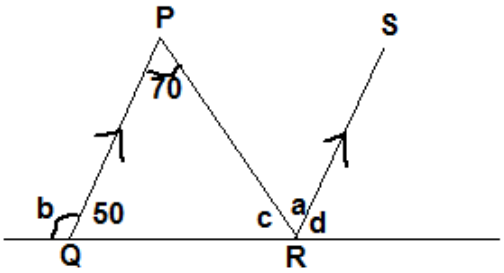
b. Find the area of a circle whose radius is 4.5cm [2]

c. Find the greatest 5 digit numbers that is exactly divisible by 315 and 210. [3]

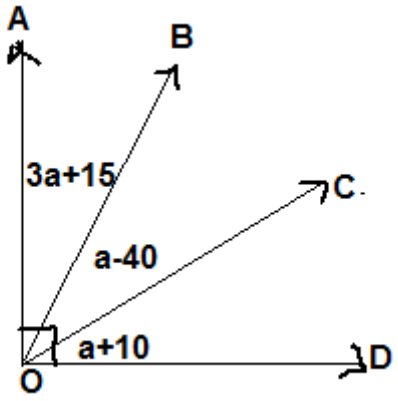
d. Convert $6.\overline{453}$ in to fraction. [3]

QUESTION6

a. In the adjoining figure find the value of a, b, c, d. [4]



b. Find the value of a in the figure given below where $\angle AOD = 90^0$ [3]



c. $\boldsymbol{a = \frac{v-u}{t}}$, find u if a= 25m/s^2, t= 10sand v= 40m/s [3]

QUESTION7

a. Find the square root of 13924 by division method [3]

b. A train 160 m long crosses a railway platform 200m long in 15 secs. How long will it take to pass another platform which is 104m long? [3]

c. Find the perimeter of a rectangle whose length is 150m and the diagonal is 170m. [4]

QUESTION8

a. Find all the angles of a triangle given that the angles are in a ratio **3:4:8.** [3]

b. Evaluate: $\sqrt{\frac{\mathbf{7^2 \times 5^4}}{\mathbf{35^2 \times 10^2}}}$ [3]

c. Find the value of x if the ratios **5:6** and **x: 15.6** are

i. Directly proportional
ii. Indirectly proportional [4]
