

(The top sheet of question paper. All question papers will be stapled on top of answer sheet)

# THE ASSAM VALLEY SCHOOL

ENTRANCE EXAMINATION,

SUBJECT: MATHEMATICS

FOR ADMISSION TO CLASS - 8

Time: 1 hour

M.M: 50

## (TO BE FILLED BY THE CANDIDATE)

Name .....  
Date of birth .....  
Studying in class .....  
Class in which admission is desired .....  
Registration Number .....  
Name of Centre .....  
Date .....

## (TO BE FILLED BY THE EXAMINER)

MARKS OBTAINED IN PERCENTAGE .....  
INITIALS OF THE EXAMINER .....  
SIGNATURE OF THE EXAMINER .....  
INITIALS OF THE CHAIR .....  
SIGNATURE OF THE CHAIR .....  
COMMENT OF THE CHAIR .....

Answers to this paper must be written on the paper provided separately. Answer any ten questions. All working, including rough work, must be clearly shown and must be done on the same sheet as the rest of the answer. Omission of essential working will result in loss of marks. The intended marks for questions or parts of questions are given in brackets [ ].

**Question 1**

A boy spent  $\frac{3}{8}$  of his money at one shop,  $\frac{4}{5}$  of the remainder at another. Finally

he was left with Rs 45. How much had he initially? [5]

**Question 2**

In an auditorium, the number of rows was equal to the number of chairs in each row. If the capacity of the auditorium is 1764, find the number of chairs. [5]

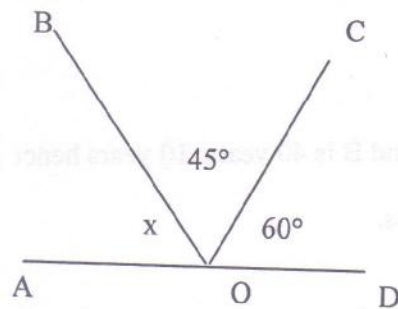
**Question 3**

a) Find the least number which when divided by 48 and 60 leaves a remainder 7 in each case. [3]

b) Find 30% of 45 kg. [2]

**Question 4**

a) [3]

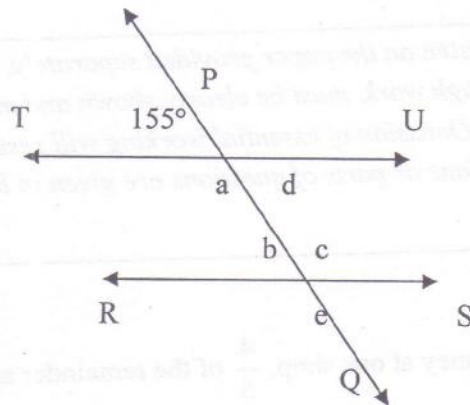


Find the value of x from the above figure

b) Find the complementary and supplementary angle of 25°. [2]

**Question 5**

[5]



In the above figure TU is parallel to RS and PQ is the transversal. Find the value of a, b, c, d and e.

**Question 6**

i) Add:  $6x^2 + 5x - 2$  ;  $5x^2 - x - 1$  and  $3x + 1$

[3]

ii) Find the product of:  $(6x^2y^3)$ ,  $(-4x^3y)$ ,  $(5xy)$

[2]

**Question 7**

Ram's salary is Rs 2,350 and Sohan's salary is Rs 2800. If Ram gets an increment of 40% and Sohan gets a 25% increment, who will earn more afterwards?

[5]

**Question 8**

The sum of the ages of A and B is 40 years. 10 years hence A will be twice as old as B. Find their present ages.

[5]

**Question 9**

Divide :  $3x^2 + 10x + 3$  by  $x + 3$

[5]

**Question 10**

Divide Rs 2200 among A, B and C in the ratio 8 : 9 : 5.

[5]

**Question 11**

- a) Find the mean proportional between 5 and 20. [3]  
b) Find the value of:  $(-37) - (-37)$  [2]

**Question 12**

- a) If the cost of 30 toys is Rs 900, what is the cost of one dozen such toys? [3]  
b) Divide 5.696 by 3.56. [2]