

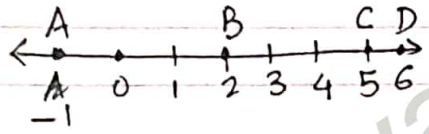
## VIII Test-8

1) A perfect square number having  $m$  digits, where  $m$  is even will have square root with  
 (a)  $\frac{m}{2}$  digits (b)  $\frac{m+1}{2}$  digits (c)  $m+1$  digits (d)  $\frac{m}{3}$  digits

2) If  $\sqrt{4096} = 64$ , then the value of  $\sqrt{4096} + \sqrt{40.96}$  is  
 (a) 70.4 (b) 64.4 (c) 60.4 (d) 68.4

3) The hypotenuse of a right angled  $\Delta$  with its base and perpendicular of lengths  $3x$ ,  $4x$  respectively is  
 (a)  $25x$  (b)  $7x$  (c)  $5x$  (d)  $16x$

4) Which of the following cannot be a perfect square?  
 (a) 441 (b) 198 (c) 676 (d) all of these

5)  which letter best represents the location of  $\sqrt{25}$  on the numberline?  
 (a) A (b) B (c) C (d) D

6) A square board has an area of 121 square units. How long is each side of the board?  
 (a) 11 units (b) 12 units (c) 13 units (d) 14 units

7)  $\sqrt{16} + \sqrt{81} = \underline{\hspace{2cm}}$  (a) 3 (b)  $\sqrt{97}$  (c) 5 (d) none

8) Which of the following is not true?

(a)  $\frac{10}{11} + \frac{11}{12} = \frac{11}{12} + \frac{10}{11}$  (b)  $\frac{10}{11} \times \frac{11}{12} = \frac{11}{12} \times \frac{10}{11}$

(c)  $\frac{10}{11} \div \frac{11}{12} = \frac{11}{12} \div \frac{10}{11}$  (d)  $\frac{10}{11} \div \frac{11}{12} = \frac{10}{11} \times \frac{12}{11}$

9) Three rational numbers lying between  $-\frac{5}{4}$  and  $\frac{1}{2}$  are  
 (a)  $-1, 0, \frac{4}{3}$  (b)  $-\frac{3}{4}, -\frac{1}{2}, \frac{1}{4}$  (c)  $-\frac{3}{4}, \frac{4}{3}, \frac{1}{4}$  (d)  $-\frac{7}{4}, -1, 0$

10) The reciprocal of  $-\frac{3}{8} \times \left(\frac{24}{+13}\right)$  is (a)  $\frac{9}{13}$  (b)  $-\frac{9}{13}$  (c)  $-\frac{13}{9}$  (d)  $\frac{13}{9}$

11) The reciprocal of 0 is (a) -1 (b) 1 (c) 0 (d) not defined.

12) To get the product  $-\frac{4}{5}$ , we should multiply  $\frac{10}{11}$  by  
 (a)  $\frac{14}{5}$  (b)  $-\frac{4}{25}$  (c)  $-\frac{22}{25}$  (d)  $-\frac{9}{5}$

13) The reciprocal of  $x^{-1}$  is  $\frac{1}{x}$  (T/F)?

III VIII Test-8 (Answers)

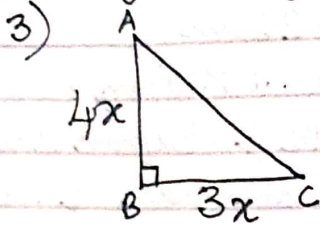
1)  $\frac{m}{2}$  digits (a)

eg:-  $\sqrt{4045} = 45$ , two digits

2)  $\sqrt{4096} = 64$

$\sqrt{40.96} = 6.4$

$\therefore \sqrt{4096} + \sqrt{40.96} = 64 + 6.4 = 70.4$  (a)



Using Pythagoras theorem in rt.  $\triangle ABC$ ,

$AC^2 = AB^2 + BC^2 = (4x)^2 + (3x)^2$   
 $= 16x^2 + 9x^2 = 25x^2$

$AC = \sqrt{25x^2} = 5x$  (c)

4)  $\sqrt{441} = 21$

$\sqrt{676} = 26$

$\therefore 198$  is not a perfect square (b)

5)  $\sqrt{25} = 5$

$\therefore C$  represents  $\sqrt{25}$  on the number line (c)

6) Area of a square board =  $S \times S = 121$

$S^2 = 121$

$\therefore$  Side of the board,  $S = \sqrt{121} = 11$  units (a)

7)  $\sqrt{16 + \sqrt{81}}$

$= \sqrt{16 + 9}$

$= \sqrt{25} = 5$  (c)

8) Since commutative property of division of rational numbers is not true,

$\frac{10}{11} \div \frac{11}{12} \neq \frac{11}{12} \div \frac{10}{11}$  (c)

9)

$-\frac{5}{4}$	$\frac{1 \times 2}{2 \times 2}$		$-\frac{3}{4}$	$-\frac{1 \times 2}{2 \times 2}$	$\frac{1}{4}$	(b)
$-\frac{5}{4}$	$\frac{2}{4}$					

$$10) \frac{-3}{8} \times \frac{-24}{13} = \frac{9}{13}$$

Reciprocal is  $\frac{13}{9}$  (d)

11) Reciprocal of 0 is  $\frac{1}{0}$ , not defined (d)

$$12) \frac{10}{11} \times x = \frac{-4}{5}$$

$$x = \frac{-4 \times 11}{5 \times 10} = \frac{-22}{25} \text{ (c)}$$

13) Reciprocal of  $x^{-1}$  is  $x'$   
Hence false.

---