

**PARAGON CONVENT SCHOOL**

**SECTOR – 24 B, CHANDIGARH**

**ANSWER KEY**

**CLASS – 7**

**SUB : MATHS**

**EXERCISE – 4A**

Q-3 Represent the following rational numbers on a number line –

$$\frac{5}{8}, \frac{-3}{8}, \frac{1}{8}, \frac{0}{8}$$



**EXERCISE – 4B**

Q-1. Express the following in the standard form :

(a)  $\frac{\cancel{33} 3}{\cancel{55} 5} = \frac{3}{5}$

(b)  $\frac{\cancel{-7} 1}{\cancel{84} 12} = \frac{-1}{12}$

(c)  $\frac{\cancel{24} 2}{\cancel{36} 3} = \frac{2}{3}$

Q-3 Are the following equivalent rational numbers ?

(a)  $\frac{-84}{100}$  and  $\frac{21}{25}$        $\frac{-84}{100} \neq \frac{21}{25}$

$$-84 \times 25 \neq 21 \times 100$$

$$-2100 \neq 2100 \quad \text{no}$$

(b)  $\frac{72}{180}$  and  $\frac{26}{65}$

$$\frac{72}{180} \quad \frac{26}{65}$$

$$72 \times 65 = 4680$$

$$26 \times 180 = 4680 \quad \text{yes.}$$

Q-6. Use  $>$ ,  $<$  or  $=$ , using the property of cross products

(a)  $\frac{3}{8}$  and  $\frac{4}{10} = \frac{3}{8} \quad \frac{4}{10}$

$$3 \times 10 = 30$$

$$4 \times 8 = 32 \quad \text{so, } 32 > 30$$

$$\text{Hence } \frac{4}{10} > \frac{3}{8}$$

(b)  $\frac{23}{40}$  and  $\frac{12}{30} = \frac{23}{40} \quad \frac{12}{30}$

$$23 \times 30 = 690$$

$$12 \times 40 = 480 \quad \text{so, } 690 > 480$$

$$\text{Hence } \frac{23}{40} > \frac{12}{30}$$

Q-7 Find the absolute value of the following –

(a)  $|7| = 7$

(b)  $\left| \frac{-3}{7} \right| = \frac{3}{7}$

(d)  $\left| \frac{4}{11} \right| = \frac{4}{11}$

Q-8 (a) Arrange in ascending order  $-\frac{7}{9}$ ,  $\frac{5}{6}$ ,  $\frac{11}{12}$ ,  $\frac{-1}{3}$ ,  $\frac{-3}{4}$

LCM OF 9,6,12,3,4 = 36

$$\frac{7 \times 4}{9 \times 4} = \frac{28}{36}$$

$$\frac{5 \times 6}{6 \times 6} = \frac{30}{36}$$

$$\frac{11 \times 3}{12 \times 3} = \frac{33}{36}$$

$$\frac{-1 \times 12}{3 \times 12} = \frac{-12}{36}$$

$$\frac{-3 \times 9}{4 \times 9} = \frac{-27}{36}$$

$$\frac{-27}{36}, \frac{-12}{36}, \frac{28}{36}, \frac{30}{36}, \frac{33}{36}$$

Ascending order :  $\frac{-3}{4}, \frac{-1}{3}, \frac{7}{9}, \frac{5}{6}, \frac{11}{12}$

Q-9 Find 5 rational numbers between  $\frac{-5}{7}$  and  $\frac{-3}{8}$

LCM of 7 and 8 = 56

$$\frac{-5 \times 8}{7 \times 8} = \frac{-40}{56}$$

$$\frac{-3 \times 7}{8 \times 7} = \frac{-21}{56}$$

Rational numbers :  $\frac{-39}{56}, \frac{-38}{56}, \frac{-37}{56}$

