

ASSIGNMENT FOR CLASS- VIII

Fractions

Following questions are consisting four sub questions in each. Illustration for one from each is given here. Students are supposed to solve other three from each by own. They are further supposed to get them checked/corrected by the concerned teachers.

Q (2) Find the answers in simplest form

i) $\frac{5}{12} + \frac{7}{18}$ (ii) $\frac{7}{24} + \frac{5}{36}$ (iii) $\frac{5}{36} - \frac{7}{54}$ (4) $\frac{7}{48} - \frac{5}{72}$

Illustration (1) $\frac{5}{12} + \frac{7}{18}$

LCM of 12 & 18 = 36

$$\begin{aligned} &= \frac{5 \times 3}{12 \times 3} + \frac{7 \times 2}{18 \times 2} \\ &= \frac{15 + 14}{36} \\ &= \frac{29}{36} \end{aligned}$$

Q (3) Find the answers in simplest form /mixed fractions :-

(i) $\frac{6}{8} \times \frac{12}{15}$ (ii) $\frac{16}{12} \times \frac{25}{20}$ (iii) $\frac{10}{8} \times \frac{18}{15}$ (iv) $\frac{18}{15} \times \frac{28}{24}$

Illustration (i) $\frac{6}{8} \times \frac{12}{15}$

$$\begin{aligned} &= \frac{6 \times 12}{8 \times 15} \\ &= \frac{3}{5} \end{aligned}$$

Q (4) Find the answers in simplest form /mixed fractions :-

(i) $\frac{12}{16} \div \frac{30}{24}$ (ii) $\frac{16}{12} \div \frac{40}{50}$ (iii) $\frac{10}{8} \div \frac{45}{54}$ (iv) $\frac{18}{15} \div \frac{96}{112}$

Illustration (i) $\frac{12}{16} \div \frac{30}{24}$

$$\begin{aligned} &= \frac{12}{16} \times \frac{24}{30} \\ &= \frac{12 \times 24}{16 \times 30} \\ &= \frac{6}{10} \\ &= \frac{3}{5} \end{aligned}$$

Linear Equations

Solve the following equations and find the value of x :-

Q (1)i) $2x + 3 = 5$ ii) $3x + 4 = 10$ iii) $4x + 5 = 17$ iv) $5x + 6 = 26$

i) $2x + 3 = 5$

Subtracting 3 from both sides,

Or, $2x + 3 - 3 = 5 - 3$

Or, $2x = 2$

Dividing both sides by 2 we get,

Or, $x = 1$

Q (2)i) $8x - 9 = 63$ ii) $9x - 10 = 80$ iii) $10x - 11 = 99$ iv) $11x - 12 = 120$

i) $8x - 9 = 63$

Adding 9 to both sides,

Or, $8x - 9 + 9 = 63 + 9$

Or, $8x = 72$

Dividing both sides by 8

Or, $x = 9$

Q (3)i) $x/5 + 2 = 6$ ii) $x/3 + 5 = 12$ iii) $x/4 + 7 = 10$ iv) $x/2 - 3 = 5$

i) $\frac{x}{5} + 2 = 6$

Subtracting 2 from both sides we get,

Or, $\frac{x}{5} + 2 - 2 = 6 - 2$

Or, $\frac{x}{5} = 4$

Multiplying 5 on both sides,

Or, $(\frac{x}{5}) \times 5 = 4 \times 5$

Or, $x = 20$

Integers

Q (1) Perform the following operations on Integers :-

1. $(+5) + (+2) =$ 2. $(-5) + (-2) =$ 3. $(+5) + (-2) =$

4. $(-5) + (+2) =$ 5. $(+7) + (+3) =$

Q (2) Perform the following operations on Integers :-

1. $(+5) - (+2) =$ 2. $(-5) - (-2) =$ 3. $(+5) - (-2) =$

4. $(-5) - (+2) =$ 5. $(+7) - (+3) =$

Q (3) Perform the following operations on Integers :-

1. $(+5) \times (+2) =$ 2. $(-5) \times (-2) =$ 3. $(+5) \times (-2) =$

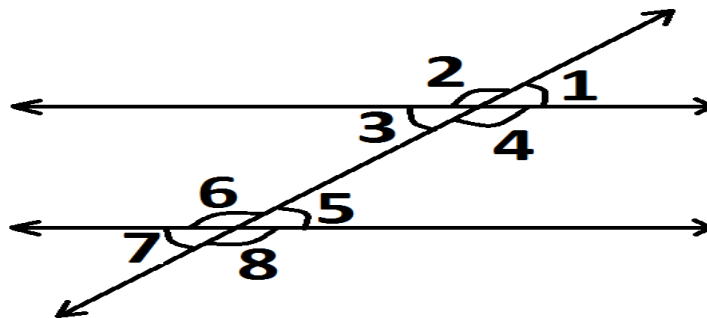
4. $(-5) \times (+2) =$ 5. $(+7) \times (+3) =$ 6. $(-7) \times (-3) =$
 7. $(+7) \times (-3) =$ 8. $(-7) \times (+3) =$ 9. $(+9) \times (+4) =$
 10. $(-9) \times (-4) =$

Quadrilaterals

Q (1) Fill up the blanks :-

- i) Opposite sides of parallelogram are _____ and _____.
- ii) Opposite angles of parallelogram are _____.
- iii) Adjacent angles of parallelogram are _____.
- iv) Diagonals of parallelogram _____ each other.
- v) Diagonals of rectangle are _____.
- vi) Each angle of rectangle measures _____.
- vii) All sides of rhombus are _____.
- viii) Diagonals of rhombus _____ each other at _____.
- ix) Diagonals of rhombus _____ opposite angles.
- x) Diagonals of square are _____.
- xi) Each angle of square measures _____.
- xii) All sides of square are _____.
- xiii) Diagonals of square _____ each other at _____.
- xiv) Diagonals of square _____ opposite angles.

Parallel lines



Q (1) When two parallel lines are cut by a transversal then :-

- i) Vertically opposite angles so formed are _____.
 $\angle 1 =$ ____, $\angle 2 =$ ____, $\angle 5 =$ ____, $\angle 6 =$ ____
- ii) Corresponding angles formed are _____.
 $\angle 1 =$ ____, $\angle 2 =$ ____, $\angle 3 =$ ____, $\angle 4 =$ ____
- iii) Alternate interior angles are _____.

- $\angle 3 = \underline{\hspace{1cm}}, \angle 4 = \underline{\hspace{1cm}}$
- iv) Alternate exterior angles are $\underline{\hspace{2cm}}$.
 $\angle 1 = \underline{\hspace{1cm}}, \angle 2 = \underline{\hspace{1cm}}$
- v) Co-interior angles are $\underline{\hspace{2cm}}$.
 $\angle 3 + \angle \underline{\hspace{1cm}} = 180^\circ, \angle 4 + \angle \underline{\hspace{1cm}} = 180^\circ$
- vi) Co-exterior angles are $\underline{\hspace{2cm}}$.
 $\angle 2 + \angle \underline{\hspace{1cm}} = 180^\circ, \angle 1 + \angle \underline{\hspace{1cm}} = 180^\circ$
- vii) Linear pairs are $\underline{\hspace{2cm}}$.
 $\angle 1 + \angle 2 = \underline{\hspace{1cm}}, \angle 2 + \angle 3 = \underline{\hspace{1cm}}, \angle 3 + \angle 4 = \underline{\hspace{1cm}}, \angle 4 + \angle 1 = \underline{\hspace{1cm}},$
 $\angle 5 + \angle 6 = \underline{\hspace{1cm}}, \angle 6 + \angle 7 = \underline{\hspace{1cm}}, \angle 7 + \angle 8 = \underline{\hspace{1cm}}, \angle 8 + \angle 5 = \underline{\hspace{1cm}},$

Profit-Loss

- (1) Profit = SP-CP
- (2) Loss = CP-SP
- (3) Profit % = Profit/CP X 100
- (4) Loss % = Loss/CP X 100
- (5) SP = CP (1+ P%)
- (6) SP = CP (1-L%)

Q (1) Find Unknown in the following :-

S.N.	CP (Rs)	SP(Rs)	Profit (Rs)	Loss (Rs)	Profit %	Loss %
1	400				10%	
2	800				20%	
3	400					10%
4	800					20%
5		880			10%	
6		1920			20%	
7		720				10%
8		1280				20%

1. C.P. = Rs. 400 , P% = 10 %

$$P \% = \left(\frac{\text{Profit}}{C.P.} \right) \times 100$$

$$\text{Or, } 10 = \left(\frac{\text{Profit}}{400} \right) \times 100$$

$$\text{Or, } \left(\frac{10 \times 400}{100} \right) = \text{Profit}$$

$$\text{Or, Profit} = 40$$

$$S.P. = C.P. + \text{Profit}$$

$$= 400 + 40$$

$$S.P. = \text{Rs. } 440$$

DATE	Assignment	Content	Book
23/03/2019	EX. 1B – Q1, Q2 & Q3	Rational numbers	R. S. Aggarwal
27/03/2019	EX. 1C – Q4, Q5, Q6, Q7, & Q8	Rational numbers	R. S. Aggarwal
29/03/2019	EX. 1D – Q5, Q8 & Q9	Rational numbers	R. S. Aggarwal
30/03/2019	EX. 1F	Rational numbers	R. S. Aggarwal
20/04/2019	EX. 16.1	Playing With Numbers	NCERT
22/04/2019	EX. 16.2	Playing With Numbers	NCERT
23/04/2019	EX. 14 A	Polygons	R. S. Aggarwal
24/04/2019	EX. 10.1	Visualising Solid Shapes	NCERT
