



## (LINEAR EQUATIONS)

Q-1 Solve linear equations.

(i)  $\frac{x+1}{7} = \frac{-2x-2}{2}$

(ii)  $-x + \frac{7}{2} = \frac{61}{4} - 5x$

(iii)  $-\frac{7}{2}(x-2) = -\frac{6}{7}(2x-4)$

(iv)  $-\frac{6}{2}\left(\frac{x}{2} - \frac{1}{2}\right) = -\frac{1}{2} + 2x$

(v)  $-\frac{6}{2}(1-0.7x) = -\frac{6}{7} + 2x \times \frac{1}{8}$

(vi)  $-x\left(1 - \frac{7}{2}\right) + \frac{7x}{4} = \frac{-2x+1}{4}$

(vii)  $-2 + 0.4 \times 0.1 + \frac{x}{2} = \frac{-4x-1}{-4}$

(viii)  $-3 + \frac{x}{2}\left(\frac{7}{2} - 4\right) = -\frac{9x}{2} - 4$

(ix)  $\frac{-4+x}{2} - \frac{2x+1}{2} = -\frac{7}{2}$

(x)  $-6x - \frac{1}{2}(x-7) + 0.7 \times 10 = -\frac{7}{2}(x-2)$

## Rational number

Q-2 Define rational and irrational numbers. Explain with examples.

Q-3  $-\frac{7}{2} + \frac{7}{2} \times \frac{4}{7} - \frac{1}{3} + \frac{6}{2}$

Q-4 find  $-\frac{1}{3} \times \frac{2}{7} - \frac{5}{7} - \frac{2}{7} \times \frac{8}{9}$

(by using properties)

Q-5 Find five rational number between  $\frac{7}{5}$  and  $\frac{9}{8}$ 

Q-6 Add  $-\frac{7}{9} + \frac{2}{7} - \frac{3}{5}$

Q-7 subtract  $\left(-\frac{7}{9} + \frac{1}{8}\right)$  from  $\left(-\frac{1}{2} + \frac{1}{4}\right)$ 

Q-9 Divide  $\frac{7}{4} \div \frac{8}{2}$

Q-10 Divide  $1\frac{1}{2} \div 1\frac{1}{7}$

## Quadrilaterals

Q-11 what is quadrilaterals? How many types of quadrilateral? Explain their properties?

Q-12 what is the difference between concave and convex quadrilaterals?

Q-13 what is polygon? Explain types of polygon (3 sides to 10 sides polygon). With diagram.

Q-14 Explain:-

(i) Linear pair

(ii) Co-interior angles

(iii) Parallel lines

- (iv) Perpendicular lines
- (v) Ray, line , line segment
- (vi) Adjacent angle
- (vii) Vertex
- (viii) Angle
- (ix) Intersecting line
- (x) Alternative angle
- (xi) Vertically opposite angle
- (xii) Corresponding angle

Basic algebra

$$\text{Q-15 } -\frac{1}{2} + 4 - \frac{5}{3}$$

$$\text{Q-16 } -2 + \frac{7}{2} - \frac{1}{6}$$

$$\text{Q-17 } -\frac{3}{2} \times \frac{3}{2}$$

$$\text{Q-18 } -1.7 + 2.5 + 20$$

$$\text{Q-19 } -1.7 \times 100$$

$$\text{Q-20 } -\frac{2.7}{100}$$

$$\text{Q-21 } -\frac{7}{2} \times \frac{2}{7} + \frac{2}{7}$$

$$\text{Q-22 } 2 \times \frac{1}{7} + \frac{6}{3} + \frac{1}{2}$$

$$\text{Q-23 } \frac{1}{7} \times \frac{15}{7} \times 0$$

$$\text{Q-24 } -7 + 0 + \frac{6}{5} + \frac{4}{25}$$

$$\text{Q-25 } -6 + 17$$

$$\text{Q-26 } -6 - 6$$

$$\text{Q-27 } -6X - 6$$

$$\text{Q-28 } -2 \times 10^2$$

$$\text{Q-29 } \frac{-2+1}{7} - \frac{1}{2}$$

$$\text{Q-30 } 0.78 \times 0.000112$$