Practice Questions (Lecture No. 1)

Note: Practice these questions. Solve and type in Math Type Software.

Q1: Separate the following numbers into the rational and irrational numbers.

$\sqrt{16}$	2.5	$\frac{1}{3}$	1.235243623876....	$\sqrt{11}$	π	$\frac{22}{7}$	4	3.15151515...	e	$\sqrt{3}$

Q2: Which of the followings are True or False?

(i) $5 > 7$ (ii) $15 > 11$ (iii) $0 > -10$

(iv) If $x = 5$, then $x < 1$

(v) $x + 9 \geq x + 12$

(vi) $2 + 5 > 6 + 1$

(v) $3x > x + x$ for x is positive.

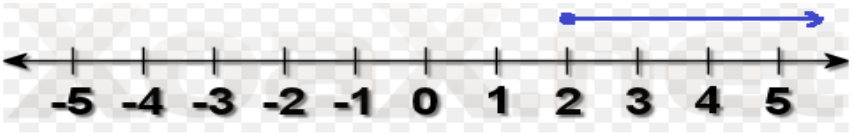
(vi) $-12 < -20$

($viii$) $20 \geq 20$

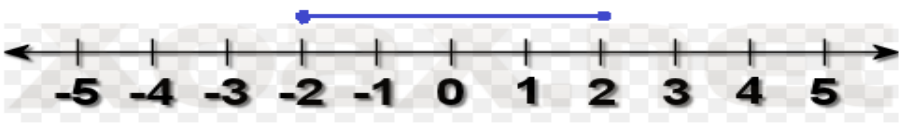
(ix) $\pi \leq 5$

(x) $2 \leq -2.5$

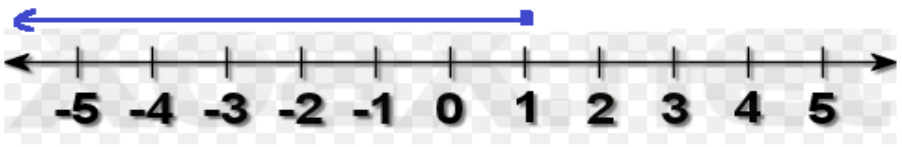
Q3: Write in form of inequality in terms of x



Q4: Write in form of inequality in terms of x



Q5: Write in form of inequality in terms of x



Q6: Solve the inequality $5y - 2 < y + 10$

Q7: Solve the inequality $-20x > 5$

Q8: Solve the inequality $8z - 2 < 14$

Q9: Solve the inequality $2 \leq y - 12 \leq 10$

Q10: Solve the inequality $5t - 3 \leq 7 - 3t$

Q11: Solve the inequality $3(2-y) > 2(3+y)$

Q12: Solve the inequality $(y-5)(y-3) \geq 0$

Q13: Solve the inequality $(z-10)(z-7) \leq 0$

Q14: Solve the inequality $7x - \frac{3}{5} \leq 2x + \frac{7}{5}$

Q15: Identify the following sets

(i) $\{0,1,2,3,....\}$

(ii) $\{-1,-2,-3,...\}$

(iii) $\{...-3,-2,-1,0,1,2,...\}$

(iv) $\left\{\frac{p}{q} \mid p, q \in Z \text{ and } q \neq 0\right\}$

(v) The set of real numbers which are not rationals.