## **Equations & Inequations**

1. Solve the following equations:

a) 
$$5x - 3 = 2x + 18$$

b) 
$$5x - 26 = 3x$$

c) 
$$9x - 1 = 4x + 34$$

d) 
$$x + 1 = 7x - 8$$

2. Solve the following equations with brackets:-

a) 
$$5(x-1)=0$$

b) 
$$10 + 2(x + 3) = 32$$
 c)  $4x + 2 = 2(x + 7)$ 

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d) 
$$4(x+1) = 2(x+5)$$

e) 
$$6(x+1)-2x=x+4$$

d) 
$$4(x+1) = 2(x+5)$$
 e)  $6(x+1) - 2x = x+4$  f)  $2(1+2x) = 2-3(x-1)$ 

3. Solve the following equations with fractions:-

a) 
$$\frac{1}{4}x + 7 = 10$$

b) 
$$\frac{2}{5}x = 3x - 26$$

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$$\frac{1}{4}x + 7 = 10$$
 b)  $\frac{2}{5}x = 3x - 26$  c)  $\frac{x-5}{2} + \frac{x+3}{3} = 6$ 

4. Solve the following in-equations:-

a) 
$$8x + 9 > 7x + 17$$

b) 
$$3(x-1) + 2(x+6) < 4(x-7)$$

c) 
$$1 + \frac{5}{8}x \ge \frac{1}{4}x + 10$$