Q 7. $\frac{1}{2}(x-3) + \frac{1}{3}(x+1) = 8$ 　　　＊ Lcm 2 & 3 = 6 ＊

$$\frac{1}{2}(x-3) + \frac{1}{3}(x+1) = 8$$

$$6\left(\frac{1}{2}(x-3)\right) + 6\left(\frac{1}{3}(x+1)\right) = 6(8)$$

$$3(x-3) + 2(x+1) = 48$$

$$3x - 9 + 2x + 2 = 48$$

$3x + 2x = 48 - 2 + 9$

$5x = 55$

$x = 55/5$

$x = 11$ 　(10)

Q 8. Solve the following inequality and graph the solution set on the number line:

Find the solution set C of $2 \leq \frac{5x-6}{2}, x \in N$

Find the solution set D of $\frac{5x-6}{2} \leq 7, x \in N$

Illustrate on C ∩ D on the number line.

C : $\frac{2}{1} \leq \frac{5x-6}{2}$ 　　　　D : $\frac{5x-6}{2} \leq \frac{7}{1}$

$2(2) \leq 1(5x-6)$ 　　　$1(5x-6) \leq 7(2)$

$4 \leq 5x - 6$ 　　　　　$5x - 6 \leq 14$

$4 + 6 \leq 5x$ 　　　　　$5x \leq 14 + 6$

$10 \leq 5x$ 　　　　　　$5x \leq 20$

$2 \leq x$ 　　　　　　　$x \leq 4$.

$2 \leq x \leq 4$ 　　(15)

Q 9.

If $x = \frac{y-2z}{3}$ make z the subject of the formula

$$\frac{x}{1} = \frac{y-2z}{3}$$

$$3x = y - 2z$$

$3x - y = -2z$

$$\frac{3x-y}{-2} = z$$ 　(10)

Q 10. If $ab - 3a = 5$ make a the subject of the formula

$$ab - 3a = 5$$

$$a(b-3) = 5$$

$$a = \frac{5}{b-3}$$ 　(10)