

HW  
30/09/21

3

## SIMPLE LINEAR EQUATIONS

Ex → 12 (A)

$$Q(33) \quad \frac{5}{12}m - 12 = 48$$

$$\Rightarrow \frac{5}{12}m - 12 + 48 \Rightarrow \frac{5}{12}m = 60 \Rightarrow 5m = 60 \times 12$$

$$\Rightarrow m = \frac{60 \times 12}{5} = 144$$

Exercise → 12 (C)

$$Q(24) \quad \frac{2x+1}{3x-2} = 1\frac{1}{4}$$

$$\Rightarrow \frac{2x+1}{3x-2} = \frac{5}{4} \Rightarrow (2x+1) \times 4 = (3x-2) \times 5$$

$$\Rightarrow 8x+4 = 15x-10 \Rightarrow 8x-15x = -10-4 \Rightarrow -7x = -14$$

$$\Rightarrow x = \frac{-14}{-7} \Rightarrow x = 2$$

Exercise → 12 (D)

Q(11) The sum of three consecutive odd numbers is 63.  
Find the numbers.

Ans  $\rightarrow$  Let the first odd number be ' $x$ '.

The second consecutive odd number is  $x + 2$

The third consecutive odd number is  $x + 4$

$\therefore$  The sum of all three consecutive odd numbers is 63.

$$\Rightarrow x + x + 2 + x + 4 = 63$$

$$\Rightarrow 3x + 6 = 63$$

$$\Rightarrow 3x = 63 - 6 \Rightarrow 3x = 57 \Rightarrow x = \frac{57}{3} \Rightarrow x = 19$$

$\therefore$  Hence the three consecutive odd numbers are  $x$ ,  $x + 2$  and  $x + 4$ . i.e., 19, 21, 23