

99. let digit at tens place = x
digit at units place = $2x$
number = $10x + 2x$
= $12x$

reversed number = $10 \times 2x + x$
= $21x$

according to condition

$$21x - 12x = 27$$

$$\Rightarrow 9x = 27$$

$$\Rightarrow x = \frac{27}{9}^3$$

$$\Rightarrow x = 3$$

$$\therefore \text{number} = 12 \times 3$$
$$= 36$$

100. let no. of working days = x
non working days = $28 - x$
according to condition
 $500x - 100(28 - x) = 9200$
 $\Rightarrow 500x - 2800 + 100x = 9200$
 $\Rightarrow 600x = 2800 + 9200$
 $\Rightarrow 600x = 12000$
 $\Rightarrow x = \frac{12000}{600}^{20}$
 $\therefore \text{no. of working days} = 20$