

$$10) A + B = 9$$

$$A = \frac{36}{3} = 12 \rightarrow 3$$

$$B = \frac{36}{1} = 36 \rightarrow 1$$

$$\frac{4 \times 9}{1} = \boxed{36 \text{ T.W.}}$$

$$\checkmark \boxed{A = 12 \text{ days}}$$

$$B = 36 \text{ days}$$

$$13) A = 10 \text{ — } 6 \quad \boxed{60}$$

$$B = 12 \text{ — } 5$$

$$C = 15 \text{ — } 4$$

$$\underline{15 \text{ mts/day}}$$

$$\Rightarrow 75 \times 960 = \underline{45}$$

$$A + B + C = \frac{45}{15} = \boxed{3 \text{ days}}$$

$$16) P = 20 \text{ — } 9 \quad \boxed{180}$$

$$Q = 30 \text{ — } 6$$

$$R = 15 \text{ — } 12$$

$$S = 45 \text{ — } 4$$

$$\underline{31 \text{ mts/day}}$$

$$P + Q + R + S = \frac{180}{31}$$

(405)

$$18) \begin{array}{l} A = 45 \text{ --- } 9 \\ B = 81 \text{ --- } 5 \end{array}$$

$$\Rightarrow \frac{A}{B} = \frac{\overset{\text{Eff}}{9}}{\underset{\text{days}}{5}} \quad \frac{5 \times 9}{9 \times 5} \begin{array}{l} 45 \\ 81 \end{array}$$

$$\underline{A+B} = \frac{405}{14} = \boxed{28 \frac{13}{14}}$$

$$19) \frac{A}{B} = \frac{\overset{\text{Eff}}{3}}{\underset{\text{days}}{1}} \quad \frac{1}{3} \rightarrow 2 \xrightarrow{\times 30} 60$$

(90)

$$A = 30 \text{ --- } 3$$

$$B = 90 \text{ --- } 1$$

$$\underline{A+B} = \frac{90}{4} = \boxed{22 \frac{1}{2}}$$

23)

$$\frac{A}{B} = \frac{2}{1}$$

$$\frac{C}{B} = \frac{2}{1}$$

$$(A : B : C) \text{ Eff} = 2 : 1 : 2$$

$$A+B+C = 12 \xrightarrow{\times 5} 60 \text{ mts (T.W.)}$$

$$A = \frac{60}{2} = \underline{30 \text{ days}}$$

21)

$$A = 6$$

$$\boxed{B = 3 \text{ days}}$$

$$A+B = 2$$

$\times 3$



$$24) (A:B:C)(\text{Eff}) = 6:3:1$$

$\xrightarrow{\times 2} \quad \xrightarrow{\times 3}$

$$(A:B:C)(\text{Days}) = 1:2:6$$

$\downarrow \times 10 \quad \downarrow \times 10 \quad \downarrow \times 10$   
 $\cancel{10} \quad \cancel{20} \quad \textcircled{60}$

$$A = 10 \text{ --- } 6$$

$$B = 20 \text{ --- } 3$$

$$C = 60 \text{ --- } 1$$

$$A+B+C = \frac{60}{10} = \textcircled{6 \text{ days}}$$

$$25) A+B=T$$

$$A=T+3$$

$$B=T+12$$

$$\frac{1}{A} + \frac{1}{B} = \frac{1}{A+B}$$

$$\frac{1}{T+3} + \frac{1}{T+12} = \frac{1}{T}$$

$$\frac{(T+12) + (T+3)}{T^2 + 12T + 3T + 36} = \frac{1}{T}$$

$$2T^2 + 15T = T^2 + 15T + 36$$

$$T^2 = 36$$

$$\boxed{T=6}$$