

$$\begin{array}{r}
 5) \quad A^+ = 18 \text{ — } 4^+ \quad \boxed{72} \\
 \quad B^- = 72 \text{ — } 1^- \\
 \hline
 A - B = 24 \text{ — } 3 \\
 \\
 4 - B = 3 \quad \checkmark \\
 \boxed{B = 1} \quad | \quad B = 72
 \end{array}$$

$$\begin{array}{r}
 9) \quad A = 30 \text{ — } 2 \quad \textcircled{60} \\
 \quad B = 60 \text{ — } 1 \\
 \hline
 (A+B) \times 5 + (B \times 1) = 60 \\
 (15) + (11) = 60 \\
 \textcircled{x = 45}
 \end{array}$$

$$\begin{array}{r}
 11) \quad A = 6 \text{ — } 10 \quad \boxed{60} \\
 \\
 A = \frac{30}{10} = \underline{\underline{3 \text{ hours}}} \quad \left| \quad \begin{array}{l} (A \times 4) \times x = 30 \\ 40 - x = 30 \quad x = \frac{3}{4} \times 60 = \underline{\underline{45 \text{ min}}} \end{array} \right. \\
 \text{Time} = \underline{\underline{3 \text{ hr } 45 \text{ min}}}
 \end{array}$$

$$\begin{array}{r}
 12) \quad A^+ = 12 \text{ --- } 5 \\
 B^- = \text{ --- } 1 \\
 \hline
 A - B = 15 \text{ --- } 4
 \end{array}$$

$$B = \frac{60}{1} = 60$$

$$\begin{array}{r}
 14) \quad A = 10 \text{ --- } 3 \\
 B = 15 \text{ --- } 2
 \end{array}$$

$$(A \times 8) + (B \times 2) = 30$$

$$24 + 2x = 30 \quad 2x = 6$$

$$\boxed{x = 3}$$

$$\begin{array}{r}
 18) \quad A^+ = 2 \text{ --- } 7^+ \\
 B^- = \text{ --- } 1^-
 \end{array}$$

$$A - B = 2\frac{1}{3} = \frac{7}{3} \text{ --- } 6$$

$$B = \frac{14}{1} = 14 \text{ hrs}$$

$$17) \quad A^+ = 60 \text{ --- } 5^+ \quad (300)$$

$$B^+ = 75 \text{ --- } 4^+$$

$$C^- = \text{ --- } 3^-$$

$$A + B - C = 50 \text{ --- } 6^+$$

$$C = \frac{300}{3} = 100 \text{ min}$$

$$19) (A+B+C) \times 5 = T.W$$

$$A:B:C = \underline{1:2:4}$$

$$T.W. = \underline{7} \times 5 = 35$$

$$A = \frac{35}{1} = \underline{35 \text{ Min}}$$

Time, Speed Distance

$S = 50 \text{ km/hr}$ $T = 6 \text{ hr}$

Distance = Speed \times Time

$D = \underline{S \times T}$

$T = \frac{D}{S}$

$S = \frac{D}{T}$

Properties: \rightarrow ✓

\Rightarrow $D = \text{constant}$

$$\frac{S_1}{S_2} = \frac{T_2}{T_1}$$

$$S_1 \times T_1 = S_2 \times T_2$$

\Rightarrow Time = constant

$$\frac{D_1}{D_2} = \frac{S_1}{S_2}$$

\Rightarrow Speed = constant

$$\frac{D_1}{D_2} = \frac{T_1}{T_2}$$

D	km	meter
T	hr	sec
S	km/hr	m/sec

$$1) S = 50 \text{ kmph}$$

$$T = 7 \text{ hrs}$$

$$D = S \times T$$

$$D = 50 \times 7$$

$$\underline{D = 350 \text{ km}}$$

$$2) D = 320 \text{ km}$$

$$T = 8 \text{ hrs}$$

$$S = ?$$

$$S = \frac{D}{T} = \frac{320}{8}$$

$$S = 40 \text{ kmph}$$

$$3) D = 450 \text{ km}$$

$$S = 18 \text{ kmph}$$

$$T = ?$$

$$T = \frac{D}{S} = \frac{450}{18} = \underline{25 \text{ hrs}}$$

$$4) D = 400 \text{ m}$$

$$S = 72 \text{ kmph} = 20 \text{ m/sec}$$

$$T = \frac{D}{S} = \frac{400}{20} = 20 \text{ sec}$$

$$5) D = 540 \text{ km}$$

$$S = 25 \text{ m/sec} = 90 \text{ kmph}$$

$$T = \frac{540}{90} = 6 \text{ hrs}$$

$$6) T = 20 \text{ sec}$$

$$S = 54 \text{ kmph}$$

$$S = 5 \times 3 = 15 \text{ m/sec}$$

$$D = 15 \times 20 = 300 \text{ m}$$