* EX-6.2 :-

1. i) In $\triangle ABC$, $DE \parallel BC$

$\therefore \frac{AD}{DB} = \frac{AE}{EC}$ (By B.P.T)

$\frac{1.5}{3} = \frac{1}{EC}$

$\therefore EC = \frac{3}{1.5} = 2cm$

ii) In $\triangle ABC$, $DE \parallel BC$

$\therefore \frac{AD}{DB} = \frac{AE}{EC}$ (By B.P.T)

$\frac{AD}{7.2} = \frac{1.8}{5.4}$

$AD = \frac{1.8 \times 7.2}{5.4} = 2.4cm$

2. (i) $\frac{PE}{EQ} = \frac{3.9}{3} = 1.3$ $\quad \frac{PF}{FR} = \frac{3.6}{2.4} = \frac{3}{2}$

$\therefore$ EF is not parallel to QR (Converse of B.P.T.)

(ii) $\frac{PE}{EQ} = \frac{4}{4.5} = \frac{8}{9}$ $\quad \frac{PF}{RF} = \frac{8}{9}$

$\therefore$ EF || QR (Converse of B.P.T.)

(iii) $\frac{PQ}{PE} = \frac{1.28}{0.18} = \frac{64}{9}$ $\quad \frac{PR}{PF} = \frac{2.56}{0.36} = \frac{64}{9}$

$\therefore$ EF || QR (Converse of B.P.T)

3. In $\triangle ABC$, $LM \| CB$

$\therefore \frac{AM}{AB} = \frac{AL}{AC}$ ---- (i) (By BPT)

In $\triangle ADC$, $LN \| CD$

$\frac{AN}{AD} = \frac{AL}{AC}$ ---- (ii) (By BPT)

From eq (i) and (ii),

$\frac{AM}{AB} = \frac{AN}{AD}$