

→ loads are symmetric  $\therefore R_{1a} = R_{3b}$ ,  $R_{2a} = R_{2b}$ ,  $R_{3a} = R_{1b}$

$$R_{1a} = R_{3b} = \frac{P \cdot 3439}{4 \cdot (4572)^3} [4 \cdot (4572)^2 - 1133(4572 + 1133)]$$

$$= 0.694P$$

$$R_{2a} = R_{2b} = \frac{P \cdot 1133}{2 \cdot (4572)^3} [2 \cdot 4572^2 + 3439(4572 + 1133)]$$

$$= 0.364P$$

$$R_{3a} = R_{1b} = \frac{P \cdot 1133 \cdot 3439}{4 \cdot (4572)^3} (4572 + 1133)$$

$$= -0.058P$$

Check balance:

$$P = R_{1a} + R_{2a} + R_{3a}$$

$$= 0.694P + 0.364P - 0.058P$$

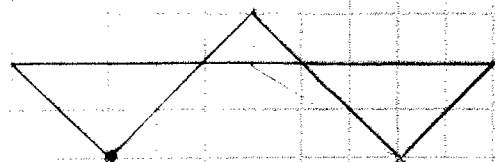
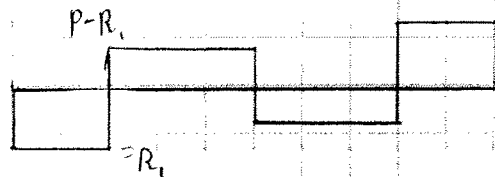
$$P = P$$

$$\therefore R_1 = R_3 = R_{1a} + R_{1b} = 0.694P - 0.058P$$

$$= 0.636P$$

$$R_2 = R_{2a} + R_{2b} = 0.364P + 0.364P$$

$$= 0.728P$$



$$M_{max} = R_1 \cdot L_1$$

$$= 0.636P \cdot L_1$$