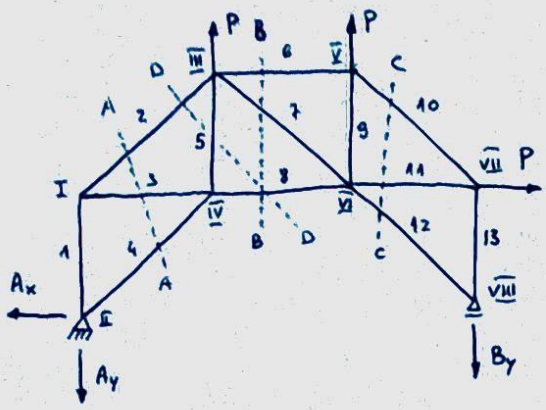


$P = 0{,}5\,qa$

$A_y = \frac{2}{3}qa$

$B_y = \frac{1}{3}qa$

$A_x = \frac{1}{2}qa$

$S_1 = \frac{1}{6}qa$ $\quad S_2 = \frac{\sqrt{2}}{6}qa$ $\quad S_3 = -\frac{1}{6}qa$ $\quad S_4 = \frac{\sqrt{2}}{2}qa$ $\quad S_5 = \frac{1}{2}qa$ $\quad S_6 = \frac{1}{3}qa$ $\quad S_7 = -\frac{\sqrt{2}}{6}qa$

$S_8 = \frac{1}{3}qa$ $\quad S_9 = \frac{1}{6}qa$ $\quad S_{10} = \frac{\sqrt{2}}{3}qa$ $\quad S_{11} = \frac{1}{6}qa$ $\quad S_{12} = 0$ $\quad S_{13} = \frac{1}{3}qa$

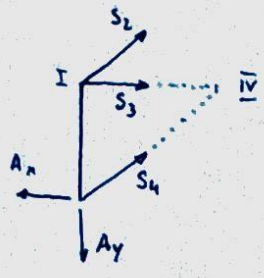
$-A_x + P = 0 \qquad A_x = P = \frac{1}{2}qa$

$-A_y - B_y = -2P \qquad A_y = -B_y + 2P = -\frac{1}{3}qa + qa = \frac{2}{3}qa$

$\Sigma M^A: \; -Pa - 2Pa + Pa + 3aB_y = 0$

$3B_y = 2P$

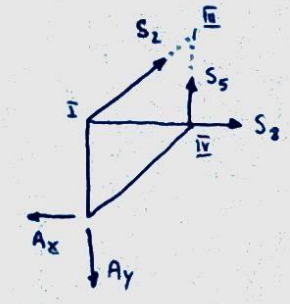
$B_y = \frac{2}{3}P = \frac{1}{3}qa$



$\Sigma M^I: \; A_x a - S_4 a \frac{\sqrt{2}}{2} = 0 \qquad S_4 \frac{\sqrt{2}}{2} = A_x \qquad S_4 = 0{,}5\sqrt{2}\,qa = \frac{\sqrt{2}}{2}qa$

$\Sigma M^{IV}: \; A_x a - A_y a + S_2 \frac{\sqrt{2}}{2}a = 0 \qquad S_2 = \sqrt{2}\left(\frac{2}{3}qa - \frac{1}{2}qa\right) = \frac{\sqrt{2}}{6}qa$

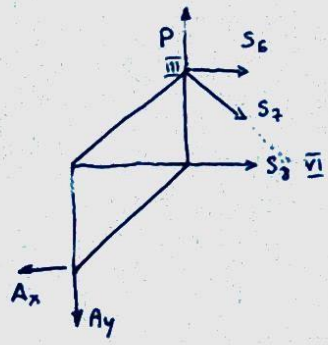
$\Sigma F_x: \; S_{2x} + S_3 + S_{4x} - A_x = 0 \qquad \frac{1}{6}qa + S_3 + \frac{1}{2}qa - \frac{1}{2}qa = 0 \qquad S_3 = -\frac{1}{6}qa$



$\Sigma M^I: \; -S_5 a + A_x a = 0 \qquad S_5 = A_x = \frac{1}{2}qa$

$\Sigma M^{II}: \; -S_8 a + 2aA_x - A_y a = 0 \qquad S_8 = 2A_x - A_y \qquad S_8 = qa - \frac{2}{3}qa = \frac{1}{3}qa$

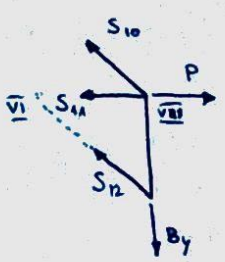
$\Sigma M^{IV}: \; S_2 a \frac{\sqrt{2}}{2} + A_x a - A_y a = 0 \qquad S_2 = \sqrt{2}(A_y - A_x) = \sqrt{2}\left(\frac{2}{3}qa - \frac{1}{2}qa\right) = \frac{\sqrt{2}}{6}qa$



$\Sigma M^{III}: \; -S_8 a + 2A_x a - A_y a = 0 \qquad S_8 = 2A_x - A_y = qa - \frac{2}{3}qa = \frac{1}{3}qa$

$\Sigma M^{VI}: \; S_6 a + Pa + A_x a - 2A_y a = 0 \qquad S_6 = 2A_y - A_x - P = \frac{4}{3}qa - \frac{1}{2}qa - \frac{1}{2}qa = \frac{1}{3}qa$

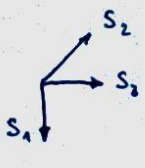
$\Sigma F_y: \; P - S_7 \frac{\sqrt{2}}{2} - A_y = 0 \qquad S_7 = \sqrt{2}(P - A_y) = \sqrt{2}\left(\frac{1}{2}qa - \frac{2}{3}qa\right) = -\frac{\sqrt{2}}{6}qa$



$\Sigma M^{VI}: \; -S_{10} a \frac{\sqrt{2}}{2} + B_y a = 0 \qquad S_{10} = \sqrt{2}\,B_y = \frac{\sqrt{2}}{3}qa$

$\Sigma M^{VIII}: \; S_{12} a \frac{\sqrt{2}}{2} = 0 \qquad S_{12} = 0$

$\Sigma F_x: \; -S_{10}\frac{\sqrt{2}}{2} - S_{11} + P = 0 \qquad S_{11} = P - S_{10}\frac{\sqrt{2}}{2} = \left(\frac{1}{2} - \frac{1}{3}\right)qa = \frac{1}{6}qa$

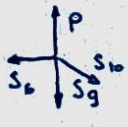


$S_2 \frac{\sqrt{2}}{2} + S_3 = 0$

$S_2 = -\sqrt{2}\,S_3$

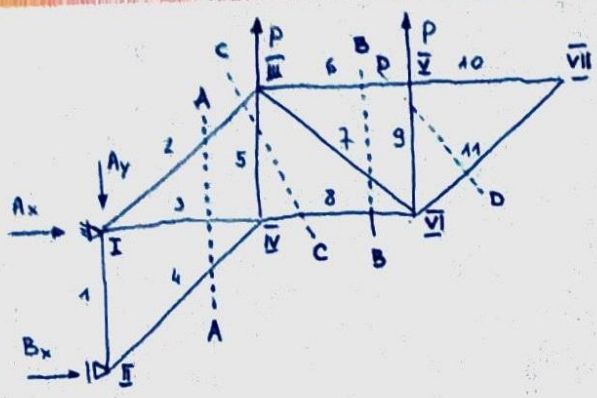
$S_2 \frac{\sqrt{2}}{2} - S_1 = 0$

$S_1 = \frac{1}{6}qa$



$P - S_9 - S_{10}\frac{\sqrt{2}}{2} = 0$

$S_9 = \frac{1}{2}qa - \frac{1}{3}qa = \frac{1}{6}qa$



$P = qa$

$A_y = 2P = 2qa$

$B_x = -3qa$

$A_x = 3qa$

$S_1 = -3qa$

$S_2 = -\sqrt{2}qa$

$S_3 = -2qa$

$S_4 = 3\sqrt{2}qa$

$S_5 = 3qa$

$S_6 = 0$

$S_7 = \sqrt{2}qa$

$S_8 = qa$

$S_9 = qa$

$S_{10} = 0$

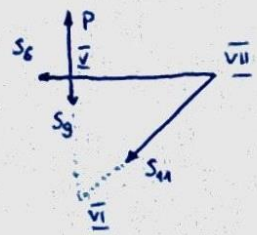
$S_{11} = 0$

$A_x + B_x = 0$

$-A_y + 2P = 0$

$\Sigma M^A: \; -B_x a - Pa - 2Pa = 0$

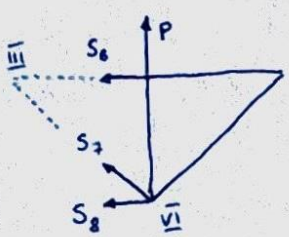
$B_x = -3P = -3qa$



$\Sigma M^V: \; S_{11} a \frac{\sqrt{2}}{2} = 0 \qquad S_{11} = 0$

$\Sigma M^{VI}: \; -S_6 a = 0 \qquad S_6 = 0$

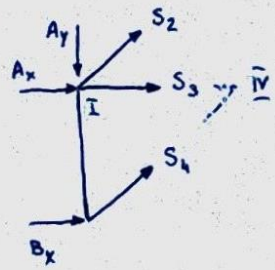
$\Sigma M^{VII}: \; -S_9 a + Pa = 0 \qquad S_9 = P = qa$



$\Sigma M^{III}: \; S_8 a - Pa = 0 \qquad S_8 = P = qa$

$\Sigma M^{VI}: \; -S_6 a = 0 \qquad S_6 = 0$

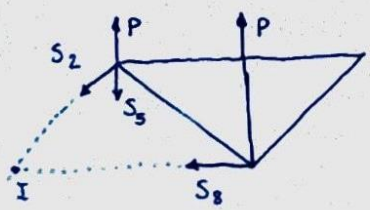
$\Sigma F_y: \; S_7 + P = 0 \qquad S_7 \frac{\sqrt{2}}{2} = P \qquad S_7 = P\sqrt{2} = \sqrt{2}qa$



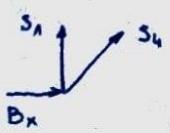
$\Sigma M^I: \; -B_x a - S_4 a \frac{\sqrt{2}}{2} = 0 \qquad S_4 \frac{\sqrt{2}}{2} = -B_x = 3qa \qquad S_4 = 3\sqrt{2}qa$

$\Sigma M^{IV}: \; S_2 a \frac{\sqrt{2}}{2} - B_x a - A_y a = 0 \qquad S_2 \frac{\sqrt{2}}{2} = A_y + B_x \qquad S_2 = 10 - \sqrt{2}qa$

$\Sigma F_x: \; A_x + B_x + S_{2x} + S_3 + S_{4x} = 0 \qquad S_3 = -S_{2x} - S_{4x} = qa - 3qa = -2qa$



$\Sigma M^I: \; S_5 a - Pa - 2Pa = 0 \qquad S_5 = 3P = 3qa$



$\Sigma F_x: \; B_x + S_{4x} = 0 \qquad S_{4x} = -B_x \qquad S_4 \frac{\sqrt{2}}{2} = 3qa \qquad S_4 = 3\sqrt{2}qa$

$\Sigma F_y: \; S_1 + S_{4y} = 0 \qquad S_1 = -S_{4y} \qquad S_1 = -3qa$