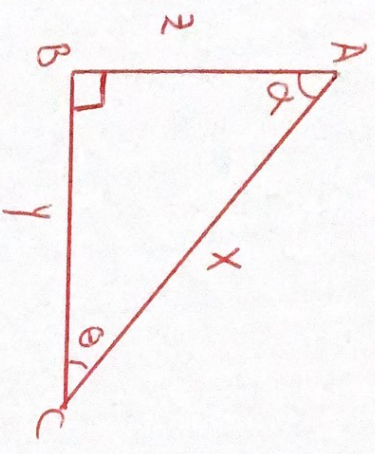


10-



$$x^2 = z^2 + y^2$$

$$H^2 = CO^2 + OA^2$$

20-

$$L = (\sec^2 A - \cot^2 C) \parallel (\csc^2 C - \tan^2 A)$$

~~L = $\frac{x^2}{z^2}$~~

$$L = \left(\frac{x^2}{z^2} - \frac{y^2}{z^2} \right) \parallel \left(\frac{x^2}{z^2} - \frac{y^2}{z^2} \right)$$

$$L = \left(\frac{x^2 - y^2}{z^2} \right) \parallel \left(\frac{x^2 - y^2}{z^2} \right)$$

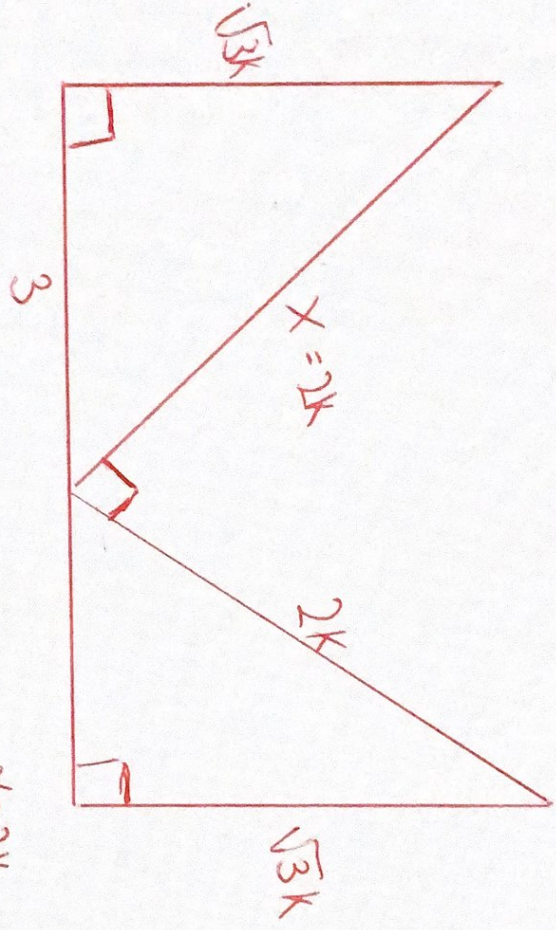
$$L = \left(\frac{x^2 - y^2}{z^2} \right)^2$$

$$L = \left(\frac{z^2 + x^2 - y^2}{z^2} \right)^2$$

$$L = \left(\frac{z^2}{z^2} \right)^2$$

$$L = 1^2$$

$$L = 1$$



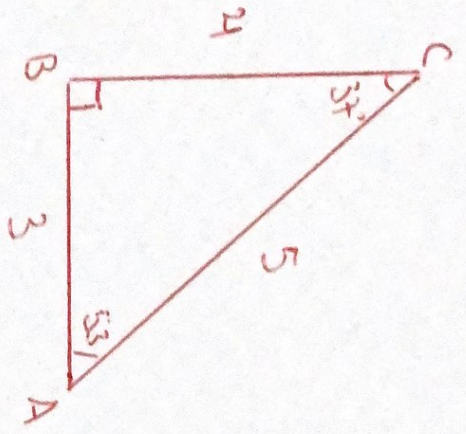
$x = 2k$
 $x = 2(3)$
 $x = 6$

$CO = \sqrt{3}k$
 $HA = 2k$

$(\sqrt{3}k)^2 + 3^2 = 2k^2$
 $3k^2 + 9 = 4k^2$
 $9 = k^2$
 $9 = k^2$

$\sqrt{9} = k$

30-



समानानुगत
त्रिकोण

$$F = \frac{12 (\tan A + \cot A)}{5 \sec A}$$

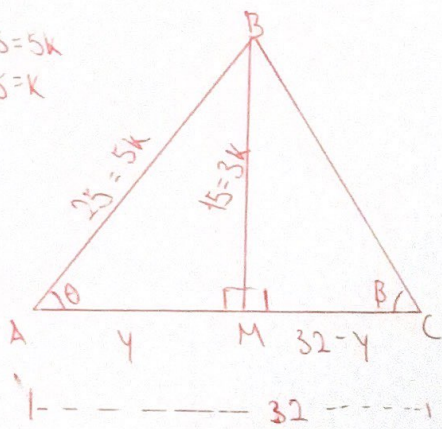
$$F = \frac{12 \left(\frac{24}{3} + \frac{3}{24} \right)}{5 \left(\frac{5}{3} \right)}$$

$$F = \frac{12 (16 + 9)}{\frac{12 \times 16 + 9}{25}} = \frac{18 \times 3}{25 \times 3} = 3$$

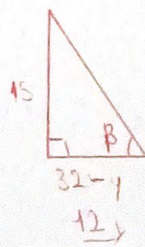
4a.

$$25 = 5k$$

$$5 = k$$



$$\sin \theta = \frac{CO}{H} = \frac{3k}{5k}$$



$$\tan \beta = \frac{CO}{CA} = \frac{15}{12}$$

$$= \frac{5}{4}$$



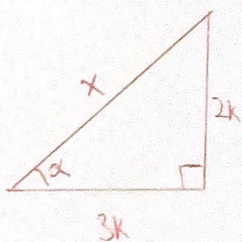
$$25^2 = 15^2 + y^2$$

$$625 = 225 + y^2$$

$$400 = y^2$$

$$20 = y$$

5a.



$$\cos \alpha = \frac{CO}{CA} = \frac{2k}{3k}$$

$$x^2 = (2k)^2 + (3k)^2$$

$$x^2 = 4k^2 + 9k^2$$

$$x^2 = 13k^2$$

$$L = 4 \operatorname{csc} 2\alpha + 3$$

$$L = 2 \left(\frac{1}{\cos} \right) + 3$$

$$L = 2 \left(\frac{1}{\frac{2}{3k}} \right) + 3$$

$$L = 2(1.5k) + 3$$

$$L = 52 - 3$$

$$L = 249$$