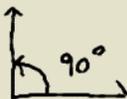


ANGLE



COMPLEMENTARY ANGLES: 2 ANGLES ADD UP TO 90°

SUPPLEMENTARY ANGLES: 2 ANGLES ADD UP TO 180°

#1

1ST ANGLE = $3X$ (135°)
 2ND ANGLE = X (45°)

$X = \frac{90}{2}$
 $X = 45°$

$3X + X = 180$
 $4X = 180$
 $\frac{4X}{4} = \frac{180}{4}$

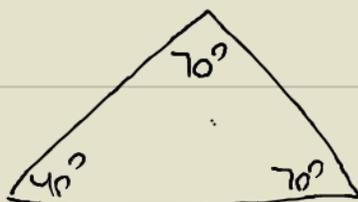
#2

1ST ANGLE = $X - 35°$ (27.5°)
 2ND ANGLE = X (62.5°)

$X - 35° + X = 90°$
 $2X - 35° = 90°$
 $2X = 90 + 35$
 $2X = 125$
 $\frac{2X}{2} = \frac{125}{2}$
 $X = 62.5$

$\frac{125}{2}$
 $\frac{35}{2}$

 27.5



FOR A TRIANGLE ALL ANGLES ADD UP TO 180°

3. $(X + 83) + (5X + 8) + (3X - 1) = 180°$

$9X + 90 = 180°$
 $9X = 180 - 90$
 $9X = 90$

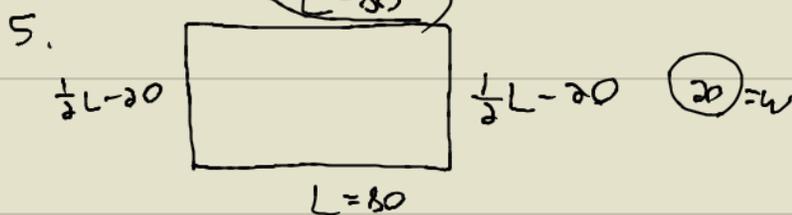
$\frac{9X}{9} = \frac{90}{9}$
 $X = 10$

$X + 83 = 10 + 83 = 93$
 $5X + 8 = 5(10) + 8 = 58$
 $3X - 1 = 3(10) - 1 = 29$

4.

1ST ANGLE = X (20°)
 2ND ANGLE = $3X$ (60°)
 3RD ANGLE = $3X + 40$ (100°)

$X + 3X + 3X + 40 = 180$
 $7X + 40 = 180$
 $7X = 180 - 40$
 $7X = 140$
 $\frac{7X}{7} = \frac{140}{7}$
 $X = 20$



$L + \frac{1}{2}L - 20 + L + \frac{1}{2}L - 20 = 200$

$3L - 40 = 200$
 $3L = 200 + 40$
 $3L = 240$
 $\frac{3L}{3} = \frac{240}{3}$
 $L = 80$