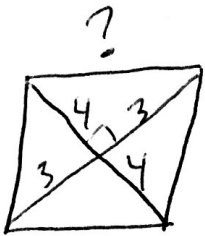


Geo HW 6-3

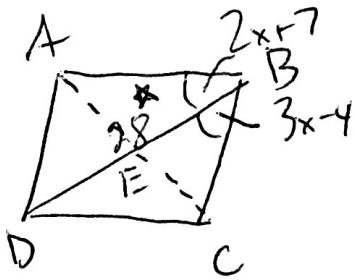


diags bisect & \perp in rhombus

$$3^2 + 4^2 = x^2$$

$x = 5$ all sides \cong in rhombus

$$5(4) = \boxed{20 \rightarrow \text{perim}}$$

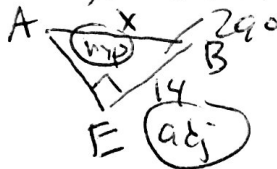


diags bisect corner \angle 's in rhombus

$$2x + 7 = 3x - 4 \quad 2(11) + 7 = 29^\circ$$

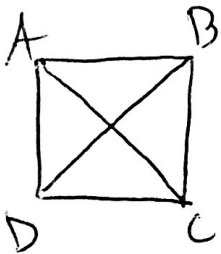
$$\underline{x = 11}$$

* diags bisect & \perp in rhombus



$$\cos(29) = \frac{14}{x}$$

$$\boxed{x = 16.0}$$

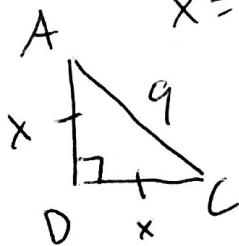


diags of square are \cong

$$2x + 1 = x + 5$$

$$2(4) + 1 = \boxed{9}$$

$$x = 4$$



\angle 's of square are rt \angle 's

4 sides of square \cong

$$x^2 + x^2 = 9^2$$

$$\frac{2x^2}{2} = \frac{81}{2}$$

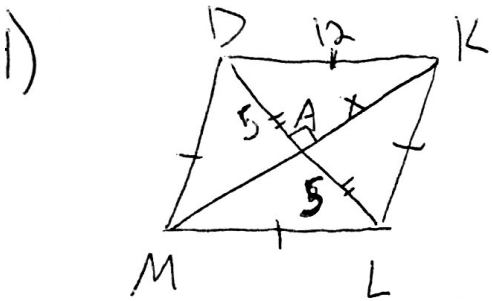
$$\sqrt{x^2} = \sqrt{40.5}$$

$$x = \sqrt{40.5}$$

$$A = bh$$

$$A = (\sqrt{40.5})(\sqrt{40.5})$$

$$\boxed{A = 40.5}$$



$P \rightarrow 48$ all sides of rhombus \cong
 $\frac{4}{4} \rightarrow 12$ each side
 * diagonals \perp + bisect each other

$$5^2 + x^2 = 12^2$$

$$\boxed{x = \sqrt{119}} \leftarrow AK$$



opp sides \cong in \square

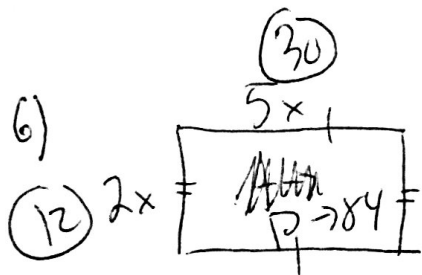
$$2(3x) + 2(2x) = 96$$

$$6x + 4x = 96$$

$$10x = 96$$

$$10x = 92$$

$$\boxed{x = 9.2}$$



opp sides rect \cong

$$2(5x) + 2(2x) = 84$$

$$10x + 4x = 84$$

$$14x = 84$$

$$\boxed{x = 6}$$

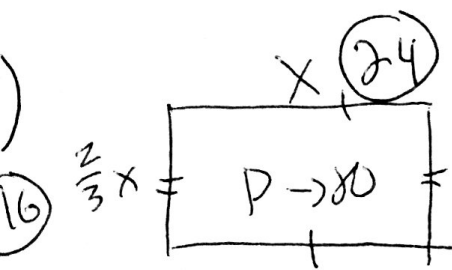
$$A = 30(12) = \boxed{360}$$

D_3

SF $\rightarrow 3$

Area ratio $\rightarrow 3^2 = 9$

$$360(9) = \boxed{3240}$$



opp sides rect =

$$2\left(\frac{2}{3}x\right) + 2(x) = 80$$

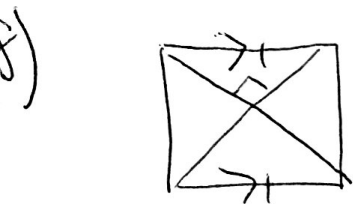
$$\frac{4}{3}x + 2x = 80$$

$$\frac{10}{3}x = 80$$

$$x = 24$$

$$A = 24(16)$$

$$A = 384$$



one set opp || = sides \rightarrow \square

diags $\perp \rightarrow$ rhombus

9) $x+7 + 2x-1 + 3x-9 + 4x-17 = 60$ (4 sides total perim)

$$10x - 20 = 60$$

$$10x = 80$$

$$x = 8$$

$$8+7 = 15$$

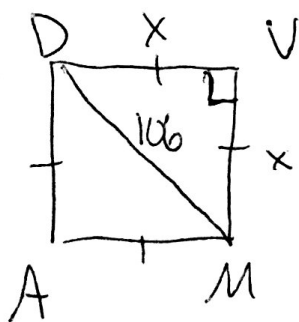
$$2(8)-1 = 15$$

$$3(8)-9 = 15$$

$$4(8)-17 = 15$$

all 4 sides

\rightarrow rhombus



4 \angle 's of square are rt \angle 's

All 4 sides square =

$$x^2 + x^2 = 106^2$$

$$\frac{2x^2}{2} = \frac{11236}{2}$$

$$\sqrt{x^2} = \sqrt{5618}$$

$$x = \sqrt{5618}$$