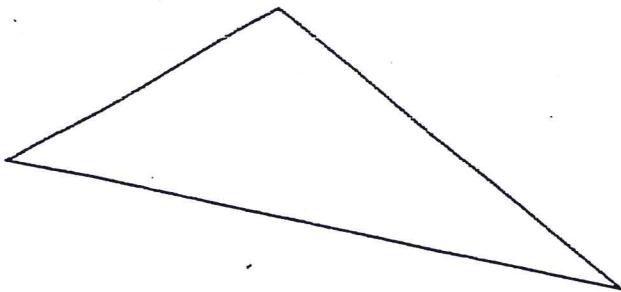


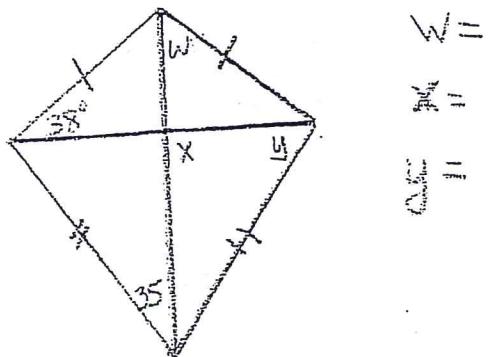
Geometry Worksheet
Chapter 4 Sections ~~1, 2, 3, 4~~
1, 2, 3, 4

Please write on your
own paper!!!

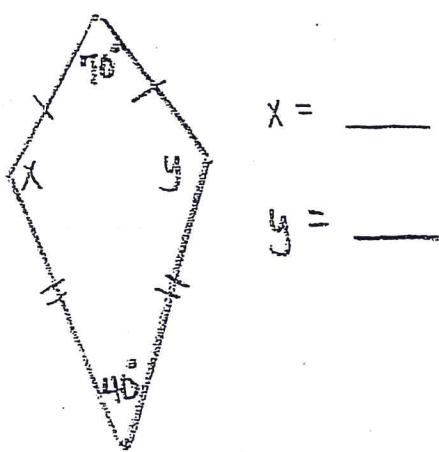
- 1) Draw a midsegment on the triangle.
Show and tell why it is a midsegment.



2)



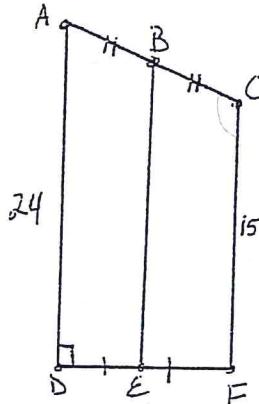
3)



$$x = \underline{\hspace{2cm}}$$

$$5x = \underline{\hspace{2cm}}$$

- 4) Find the unknowns.



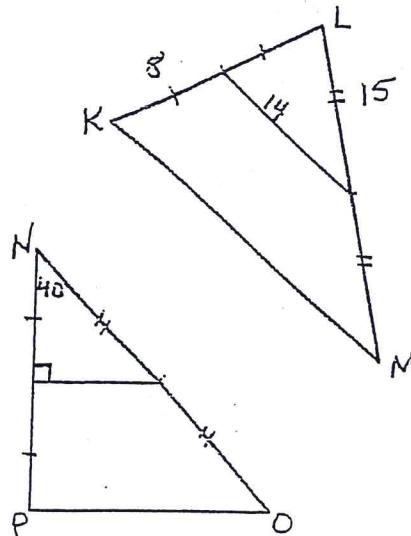
$$m\angle BEF = \underline{\hspace{2cm}}$$

$$m\angle EFC = \underline{\hspace{2cm}}$$

$$m\angle FCA = \underline{\hspace{2cm}}$$

$$BE = \underline{\hspace{2cm}}$$

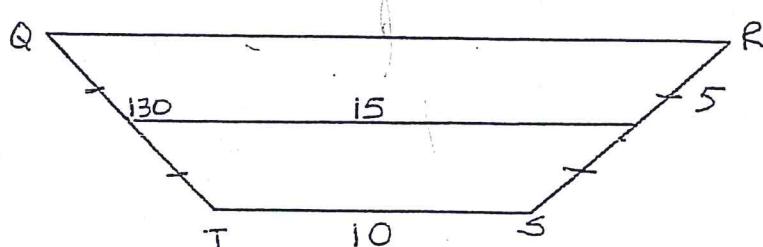
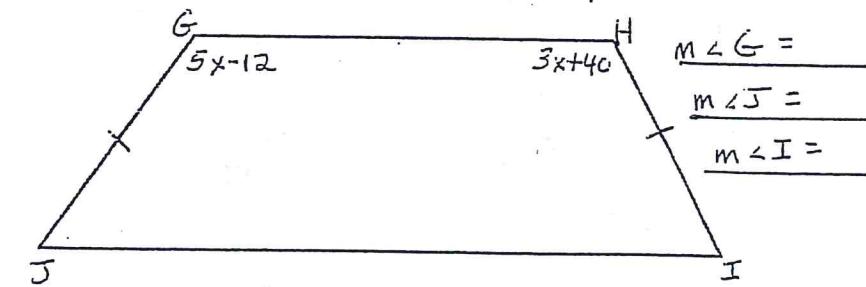
- 5) Find the unknown measures.



$$\text{perimeter of } \triangle KLM = \underline{\hspace{2cm}}$$

$$m\angle O = \underline{\hspace{2cm}}$$

$$m\angle P = \underline{\hspace{2cm}}$$

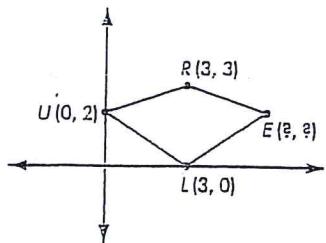


$$\text{Perimeter of trapezoid QRST} = \underline{\hspace{2cm}}$$

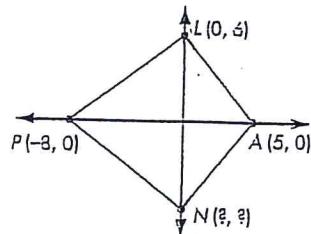
$$m\angle Q = \underline{\hspace{2cm}} \quad m\angle T = \underline{\hspace{2cm}}$$

$$m\angle R = \underline{\hspace{2cm}} \quad m\angle S = \underline{\hspace{2cm}}$$

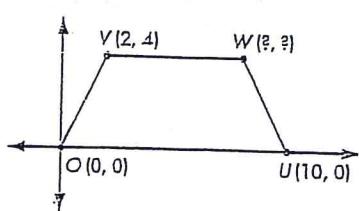
10. RULE is a kite.
What are the coordinates of point E? _____



11. PLAN is a kite. What are the coordinates of point N? _____

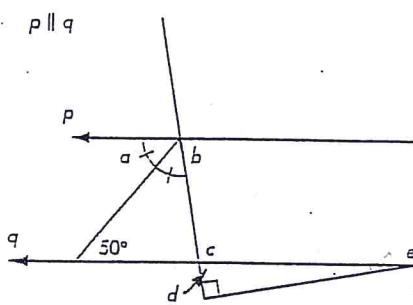


12. UOVW is an isosceles trapezoid. What are the coordinates of point W? _____



13. Calculate the measure of each lettered angle.

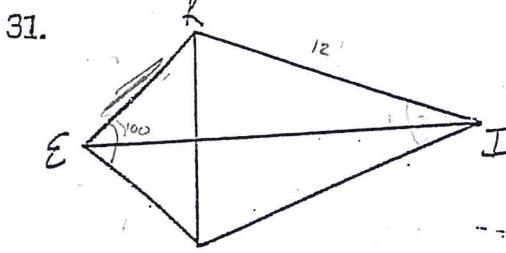
On 5 angles, give a reason to back up your decision (a conjecture name)



$$\begin{aligned} a &= \text{_____} \\ b &= \text{_____} \\ c &= \text{_____} \\ d &= \text{_____} \end{aligned}$$

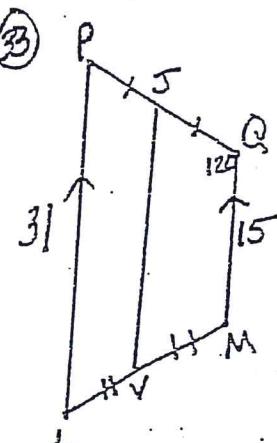
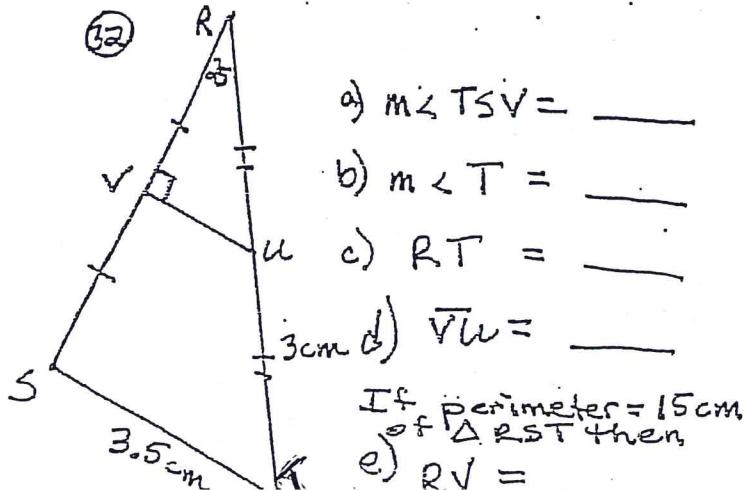
$$\begin{aligned} e &= \text{_____} \\ f &= \text{_____} \\ g &= \text{_____} \\ h &= \text{_____} \end{aligned}$$

$$\begin{aligned} i &= \text{_____} \\ k &= \text{_____} \\ m &= \text{_____} \\ n &= \text{_____} \end{aligned}$$



KITE is a kite. The perimeter of KITE is 38 in.
KI = 12 in and KE = ?

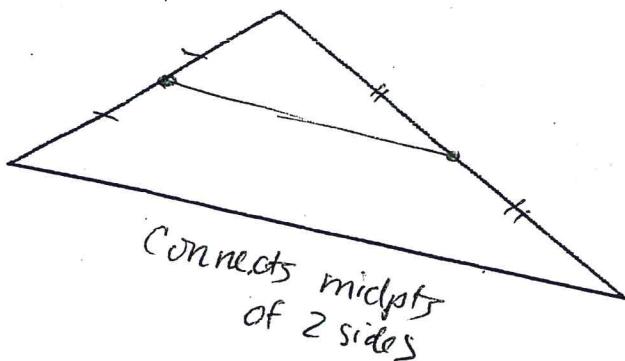
$m\angle TEK = 100^\circ$ and $m\angle TIK = 50^\circ$
 $m\angle EKI = ?$, $m\angle KEI = ?$ and $m\angle TKI = ?$



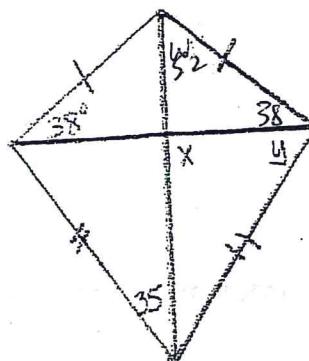
$$\begin{aligned} a) m\angle QJV &= \text{_____} \\ b) m\angle L &= \text{_____} \\ c) JV &= \text{_____} \end{aligned}$$

Geometry Worksheet
Chapter 5 Sections 8, 9, 10
1, 2, 3 & 4

- 1) Draw a midsegment on the triangle.
Show and tell why it is a midsegment.



2)

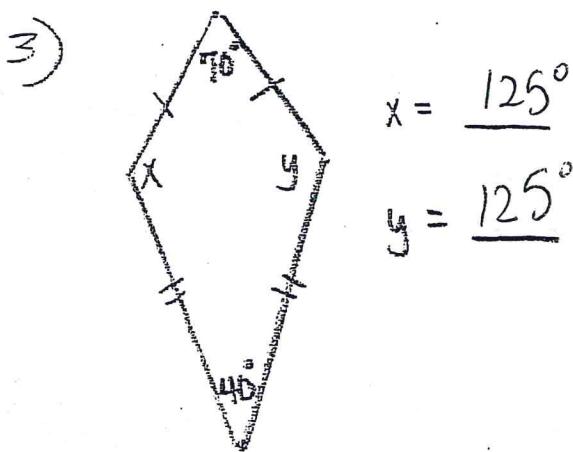


$$w = 52^\circ$$

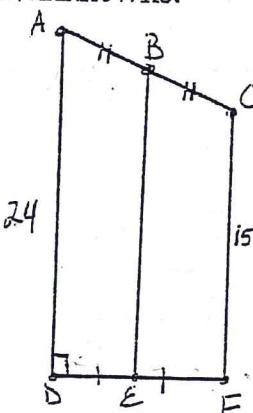
$$x = 90^\circ$$

$$y = \cancel{65}^\circ$$

$$y = 55^\circ$$

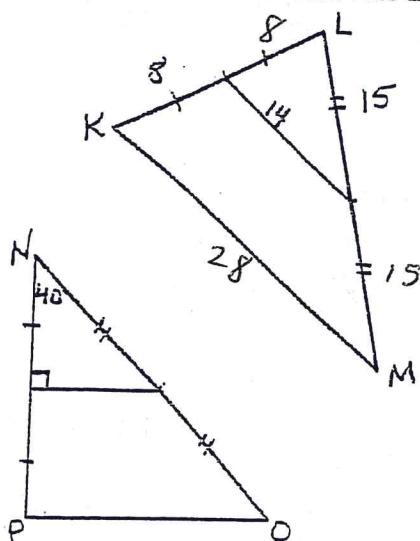


- 4) Find the unknowns.



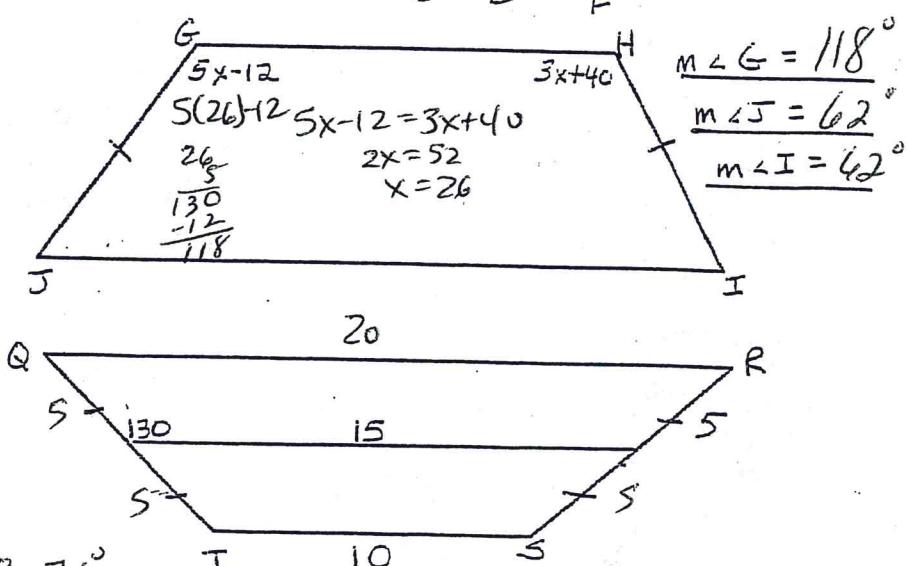
$$\begin{aligned} m\angle BEF &= 90^\circ \\ m\angle EFC &= 90^\circ \\ m\angle FCA &= CBD \\ BE &= \frac{39}{2} = 19.5 \end{aligned}$$

- 5) Find the unknown measures.



$$\text{perimeter of } \triangle KLM = \underline{16+30+28=74^\circ}$$

$$\begin{aligned} m\angle O &= \underline{50^\circ} \\ m\angle P &= \underline{90^\circ} \end{aligned}$$

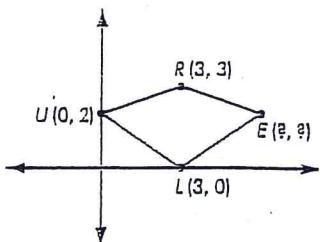


$$\text{Perimeter of trapezoid } QRST = \underline{50 \text{ cm}}$$

$$\begin{aligned} m\angle Q &= \underline{50^\circ} & m\angle T &= \underline{130^\circ} \\ m\angle R &= \underline{50^\circ} & m\angle S &= \underline{130^\circ} \end{aligned}$$

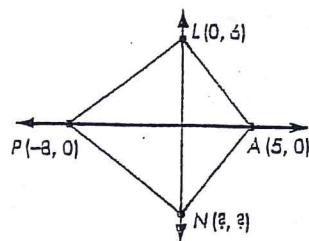
10. RULE is a kite.

What are the coordinates of point E? (6, 2)



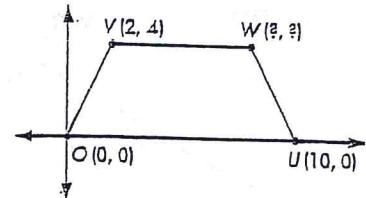
11. PLAN is a kite. What are the coordinates of point N?

(0, -6)



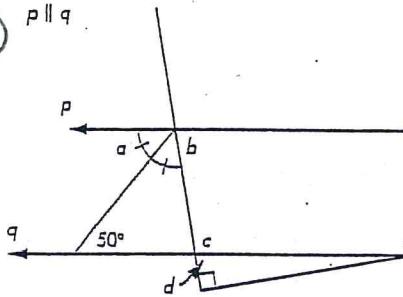
12. UOVW is an isosceles trapezoid. What are the coordinates of point W?

(8, 4)



13. Calculate the measure of each lettered angle.

a-g $P \parallel q$



$$a = 50^\circ \text{ AIA}$$

$$b = 80^\circ \text{ LP}$$

$$c = 100^\circ \text{ AIA to } 2a, \text{ or CIA}$$

$$d = 80^\circ \text{ LP}$$

$$e = 170^\circ \text{ Sum, LP}$$

$$f = 10^\circ \text{ LP}$$

$$g = 85^\circ \text{ Sum, } \text{isos } \Delta$$

$$h = 47.5^\circ \text{ VA, Sum, } \text{isos } \Delta$$

$$i = 132.5^\circ \text{ isos } \Delta, \text{ LP}$$

$$k = 47.5^\circ \text{ CA}$$

$$m = 170^\circ \text{ ReSum of } \angle$$

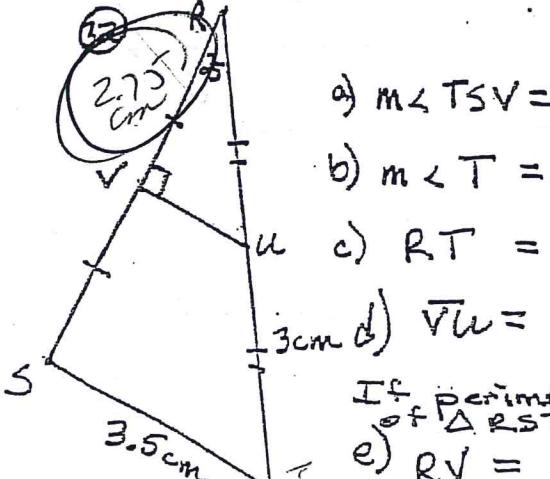
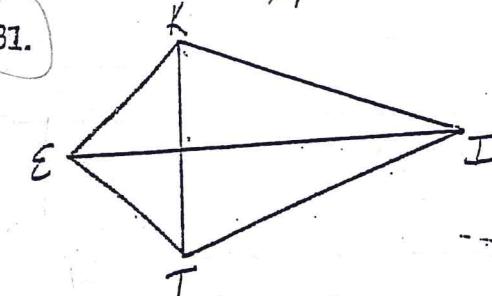
$$n = 95^\circ \text{ LP, Sum}$$

KITE is a kite. The perimeter of KITE is 38 cm.
KI = 12 cm and KE = ? 7 cm

m<TEK = 100 and m<TIK = 50

m<EKI = ?, m<KEI = ?, and m<TKI = ?

$$\frac{360-150}{2} = 105^\circ \quad 50^\circ \quad 65^\circ$$



a) $m\angle TSV = 90^\circ$

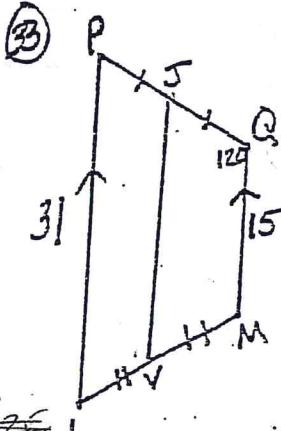
b) $m\angle T = 65^\circ$

c) $RT = 6 \text{ cm}$

d) $RV = 1.75 \text{ cm}$

If Perimeter = 15 cm
of $\triangle RST$ then

e) $RV = 4.5 \text{ cm}$



a) $m\angle QJV = 60^\circ$

b) $m\angle L = 129^\circ$

c) $JV = 23 \text{ cm}$