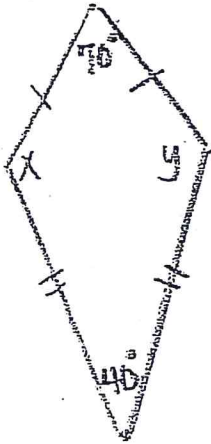Geometry Worksheet
Chapter 5 Sections 1, 2, 3 & 4

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

skip this one

2)

W =
X =
Y =

35°

35

3)

X = _____

Y = _____

70

40

4) Find the unknowns.

24

15
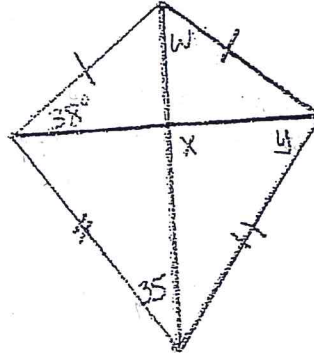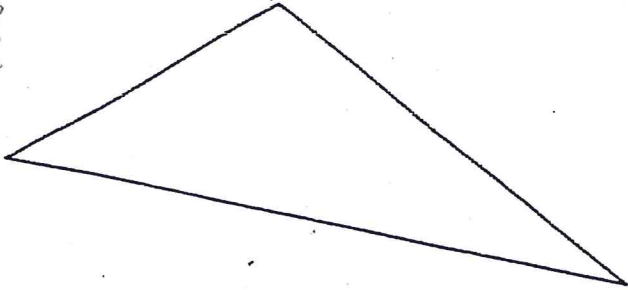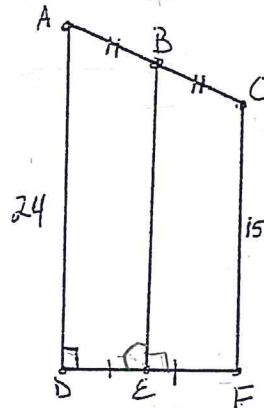
m∠BEF = _____
m∠EFC = _____
m∠FCA = _____
BE = _____

5) Find the unknown measures.

8

14

15

40
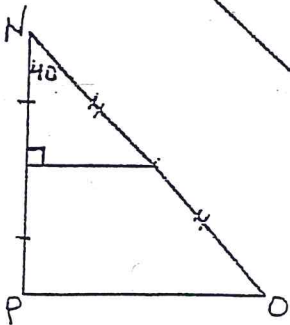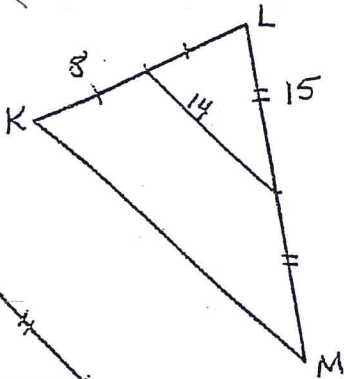
perimeter of △KLM = _____

m∠O = _____

m∠P = _____

5x-12   3x+40

m∠G = _____
m∠J = _____
m∠I = _____

130   15   5

10
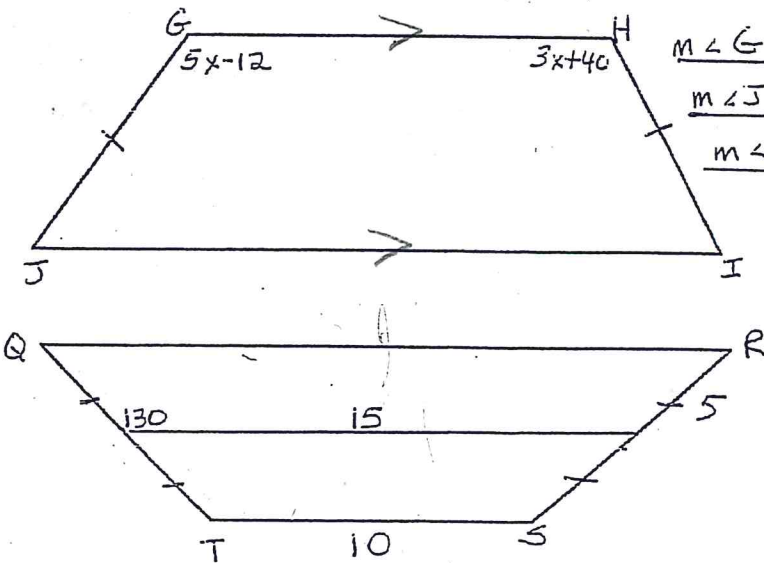
Perimeter of trapezoid QRST = _____

m∠Q = _____   m∠T = _____

m∠R = _____   m∠S = _____

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

R (3, 3)
U (0, 2)
E (?, ?)
L (3, 0)
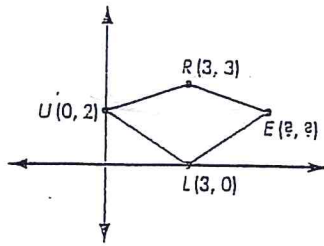
11. PLAN is a kite. What are the coordinates of point N? _____

L (0, 6)
P (-8, 0)
A (5, 0)
N (?, ?)

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

V (2, 4)   W (?, ?)
O (0, 0)   U (10, 0)
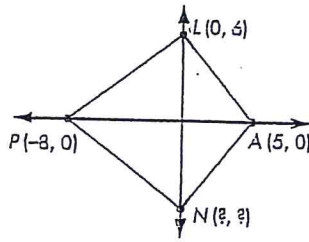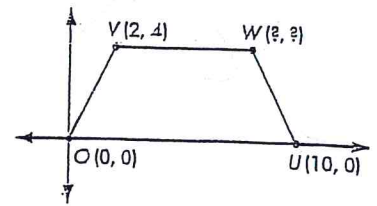
13. Calculate the measure of each lettered angle. *On 5 angles, give a reason to back up your decision (a conjecture name)*

p ∥ q

P
a b
q   50°   c
d

n   m   k
g
e   f
h
i
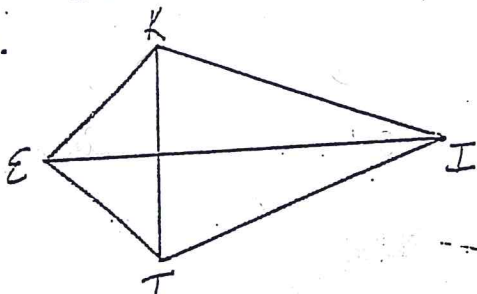
a = _____
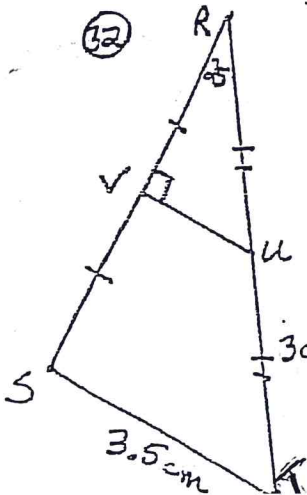b = _____
c = _____
d = _____

e = _____
f = _____
g = _____
h = _____

i = _____
k = _____
m = _____
n = _____

31.

V
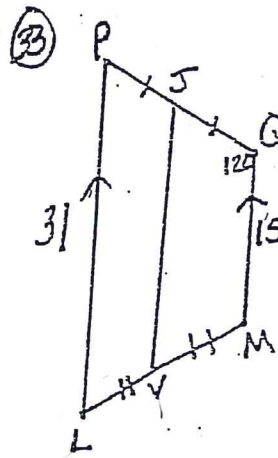E   I
T
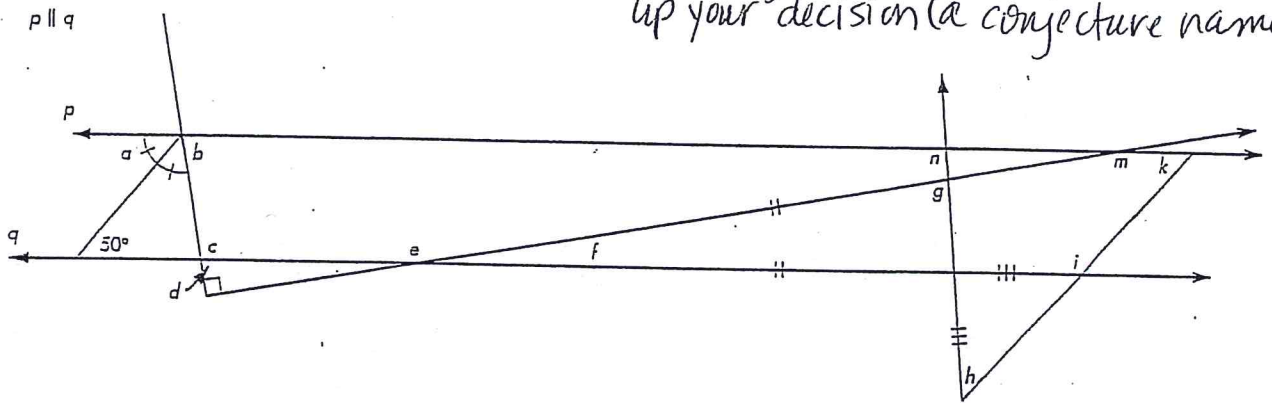
KITE is a kite. The perimeter of KITE is 38 m.
KI = 12 cm and KE = ?
m<TEK = 100° and m<TIK = 50°
m<EKI = ? m<KEI = ? and m<TKI = ?

32.

R
V
S   3.5cm   K

a) m< TSV = ____
b) m < T = ____
c) RT = ____
d) $\overline{VW}$ = ____

3cm

If perimeter = 15cm
of △RST then
e) RV = ____

33.

P
J
Q
125°
3| |5
L   M
V
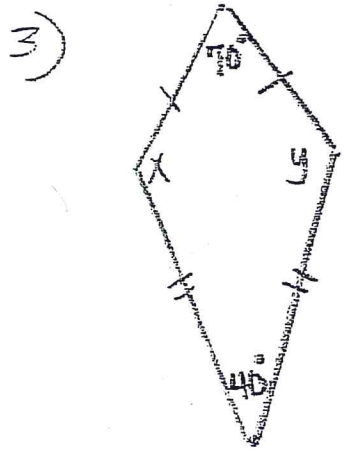
a) m<QJV = ____
b) m< L = ____
c) JV = ____

Geometry Worksheet
Chapter 5 Sections 1, 2, 3 & 4

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

Connects midpts
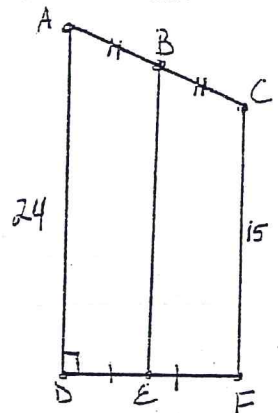of 2 sides

2)

$W = 52°$

$X = 90°$

$= 55°$

3)
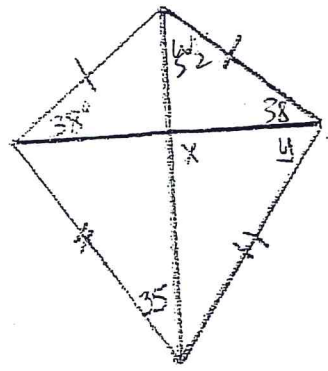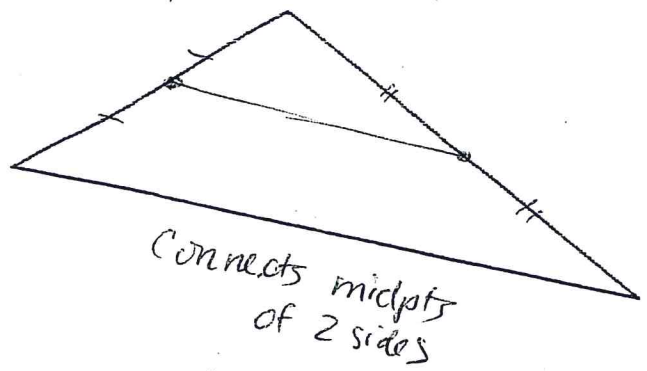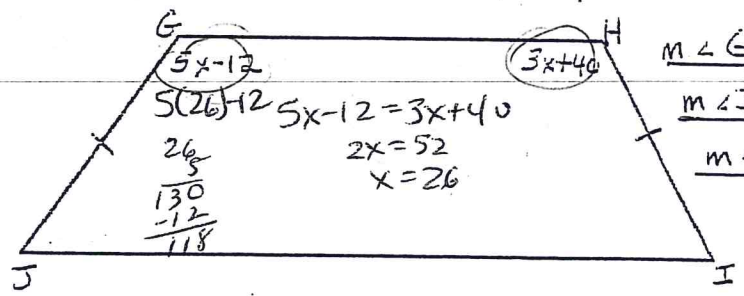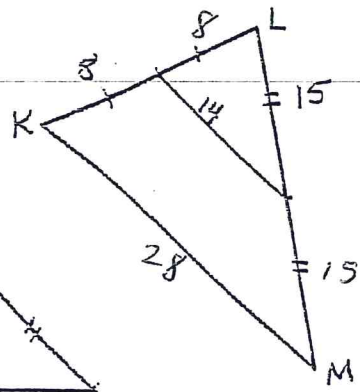
$x = 125°$

$y = 125°$

4) Find the unknowns.

$m \angle BEF = 90°$
$m \angle EFC = 90°$
$m \angle F = \angle A = CBE$
$BE = \frac{39}{2} \ 19.5$

5) Find the unknown measures.

$5x-12$ $3x+40$
$5(26)-12$ $5x-12=3x+40$
$\frac{26}{5}$ $2x=52$
$\frac{130}{5}$ $x=26$
$\frac{-12}{118}$

$m \angle G = 118°$
$m \angle J = 62°$
$m \angle I = 42°$

20

130

15

5

5

5

10
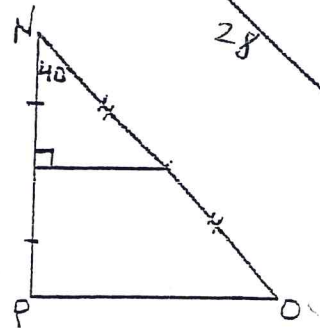
perimeter of $\triangle KLM =$ ____ $16+30+28=74$ cm

$m \angle O = 50°$

$m \angle P = 90°$
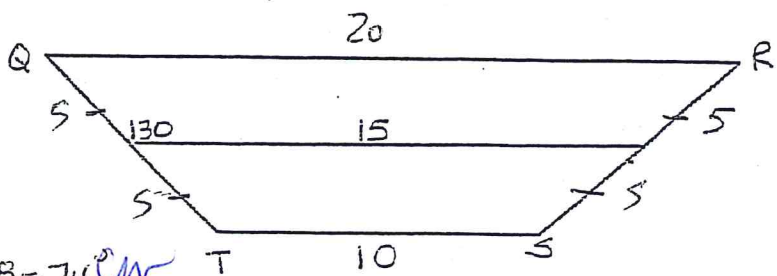
Perimeter of trapezoid $QRST = 50$ cm

$m \angle Q = 50°$ $m \angle T = 130°$

$m \angle R = 50°$ $m \angle S = 130°$

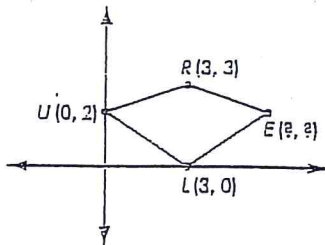**10.** RULE is a kite. What are the coordinates of point E? __(6, 2)__

R (3, 3)

U (0, 2)   E (8, 2)

L (3, 0)

11. PLAN is a kite. What are the coordinates of point N? __(0, -6)__
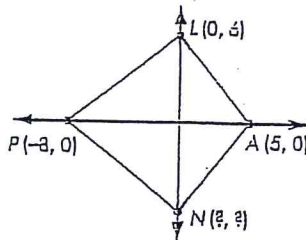
L (0, 6)

P (-3, 0)   A (5, 0)

N (2, 2)

12. UOVW is an isosceles trapezoid. What are the coordinates of point W? __(8, 4)__

V (2, 4)   W (8, 4)

O (0, 0)   U (10, 0)

13. Calculate the measure of each lettered angle.

p ∥ q

p

a   b

q   50°   c   d   e   f

95° a
g
m k
h
i
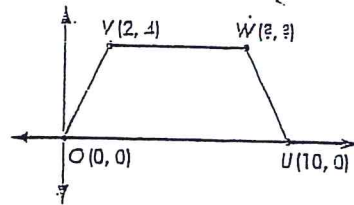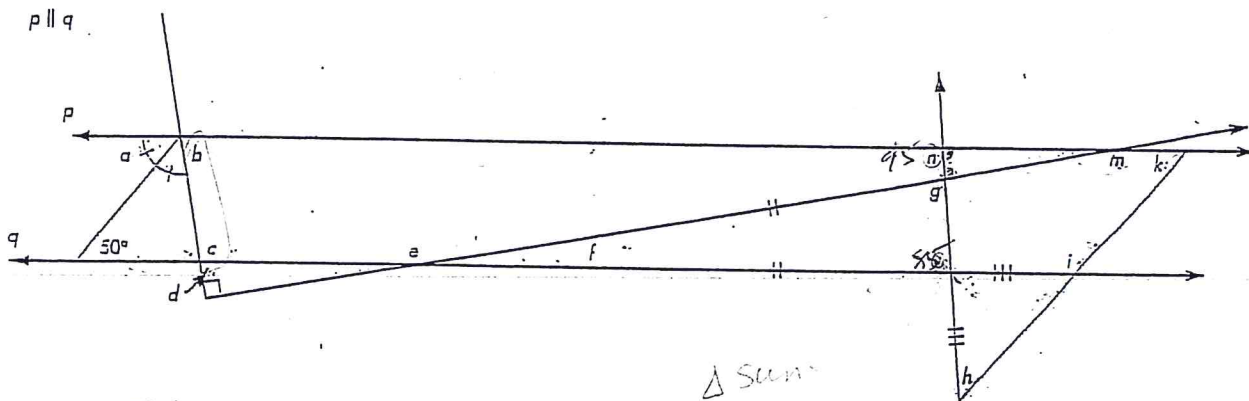
$a =$ __50°__ ATA
$b =$ __80°__ LP
$c =$ __100°__ CIA
$d =$ __80°__ LP

$e =$ __170°__ LP △ Sum
$f =$ __10°__ LP & VA
$g =$ __85°__ Isos△ (△Sum)
$h =$ __47.5°__ VA, △Sum

$i =$ __132.5°__ LP (Isos △)
$k =$ __47.5°__ CIA
$m =$ __170°__ △Sum, LP
$n =$ __95°__ CIA

31.

K
7cm 40 65°   12cm
60°   25°
E 50°   25°   I
7cm 40 65°   12cm
T
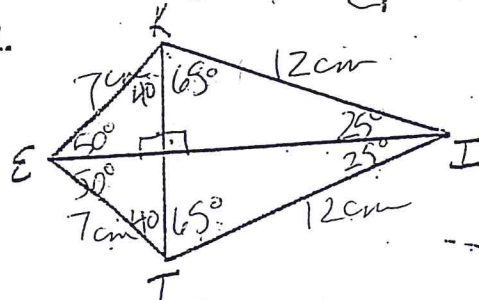
KITE is a kite. The perimeter of KITE is 38 cm m.
KI = 12 cm and KE = ? 7cm
m<TEK = 100 and m<TIK = 50
m<EKI = ? m<KEI = ? and m<TKI = ?
$\frac{360-150}{2}$ =105° 50°   65°

32.

R
2.75 cm
V
1.75 u
3cm
S
3.5cm
T
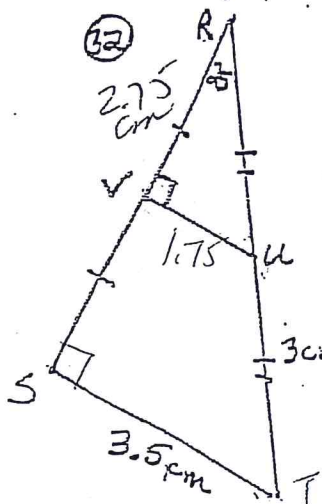
a) m< TSV = __90°__
b) m < T = __65°__
c) RT = __6 cm__
d) $\overline{VU}$ = __1.75 cm__

If perimeter = 15cm of △RST then
e) RV = _____

33.

P
J
Q
31 125 15
M
V

a). m<QJV = __60°__
b) m < L = __CBD__
c) JV = __23 cm__