

Worksheet 2015-8EN-00001(1)

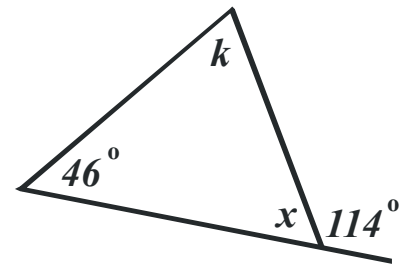
(1) Define the following:

(a) Isosceles triangle

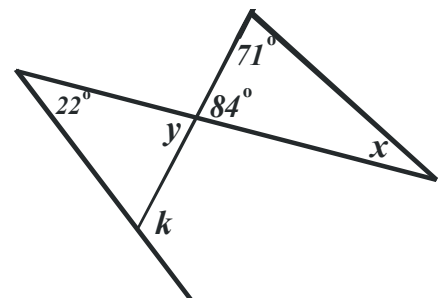
(b) Acute triangle

(2) Determine the value(s) of x and/or y in each of the following sketches. Also give complete reasons.

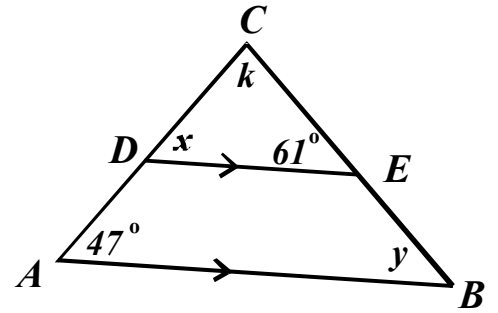
(a)



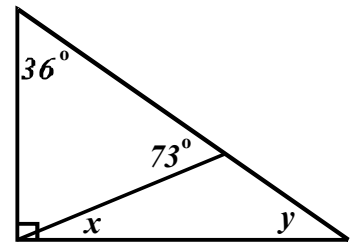
(b)



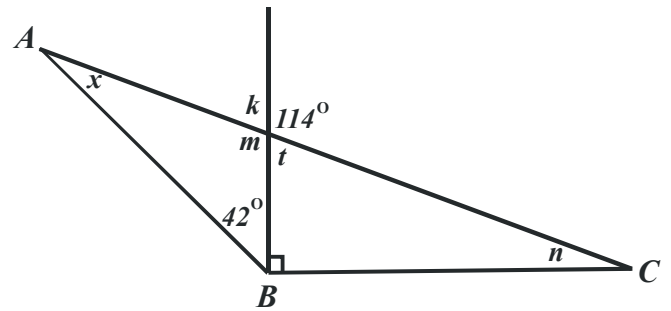
(c)



(d)

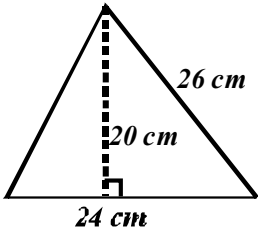


(3) Prove that ΔABC is an isosceles triangle.
Show all calculations and provide complete reasons:

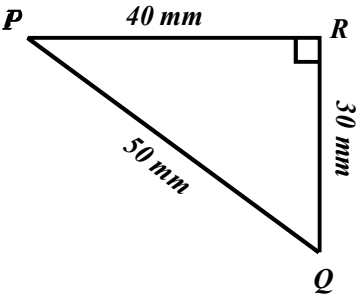


(4) Calculate the area of triangle PQR in each of the following:

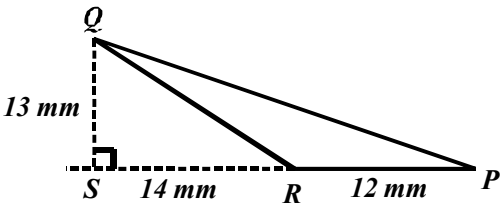
(a)



(b)



(c)



- (5) (a) Construct ΔPKS with $PK = 64 \text{ mm}$, $\hat{P} = 45^\circ$ and $\hat{K} = 60^\circ$.
(b) Construct PR with $PR \perp KS$.
(c) Construct KL with $KL \perp PS$.
(d) Label the intersection of PR and KL , as O .
(e) Join SO , and extend it so that SO intersects PK in T .
(f) Measure $\hat{STK}$.