Pythagoras – finding the hypotenuse
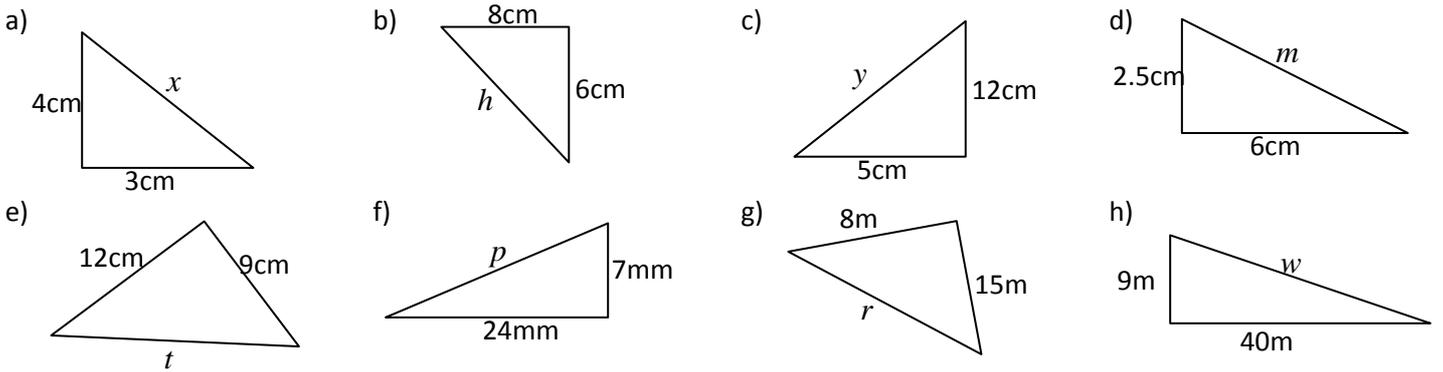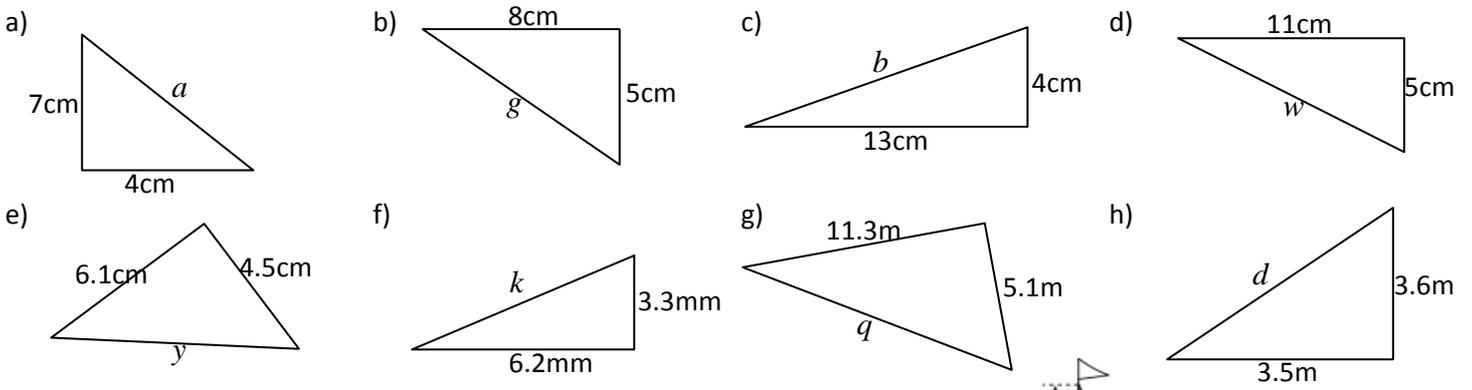
1. In each of these right angled triangles find the missing longer side.

a)

4cm
x
3cm

b)

8cm
h
6cm

c)

y
12cm
5cm

d)

2.5cm
m
6cm

e)

12cm
9cm
t

f)

p
7mm
24mm

g)

8m
15m
r

h)

9m
w
40m

2. In each of these right angled triangles find the missing longer side. Round your answers to 1 decimal place.

a)

7cm
a
4cm

b)

8cm
g
5cm

c)

b
4cm
13cm

d)

11cm
w
5cm

e)

6.1cm
4.5cm
y

f)

k
3.3mm
6.2mm

g)

11.3m
5.1m
q

h)

d
3.6m
3.5m

3. What is the length of the longest side of the sail of the boat?

5.4 m   ?   3.8 m
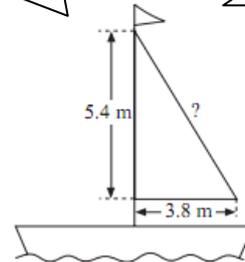
4. Which rectangle has the longest diagonal?

D   C
4 m
A   7 m   B

H   G
1 m
E   8 m   F
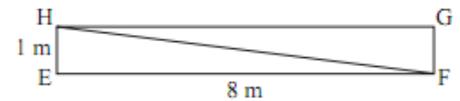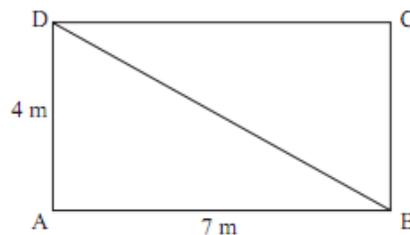
5. a) Find the length of side x.   b) Find the length of side y.

y
1   *x*   1
1
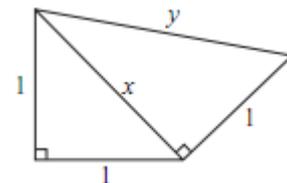
6. Use Pythagoras' Theorem to determine whether these triangles have right angles or not.

a)

15cm   25cm
20cm

b)

7cm
22cm   20cm

c)

2.5cm
2cm
1.5cm

d)

20cm
20.5cm   4.5cm