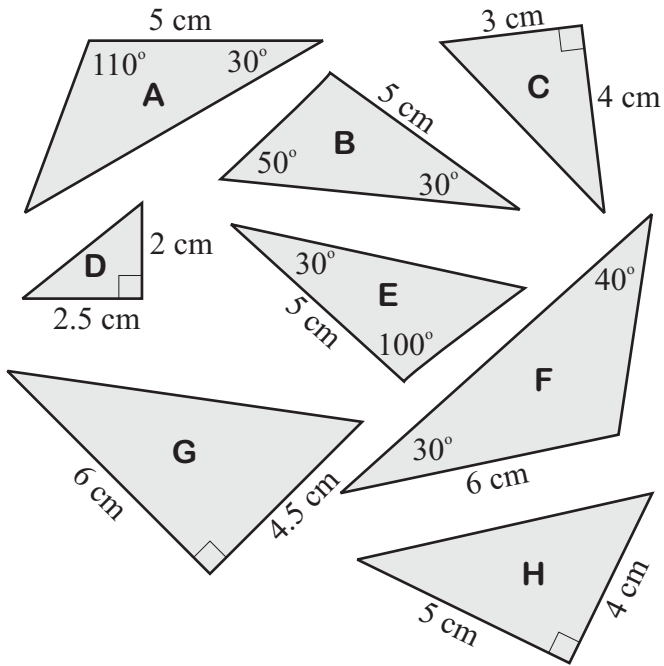*Name*: _____

1. Match the pairs of similar and congruent triangles from the triangles below.
There are three pairs if similar triangles and one pair of congruent triangles.
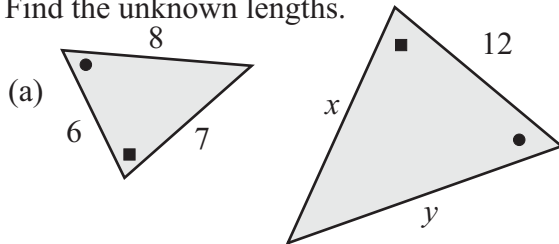
5 cm
110° 30°
A

3 cm
C
4 cm

5 cm
B
50°
30°

2 cm
D
2.5 cm

30°
E
5 cm
100°

40°
F
30°
6 cm

G
6 cm
4.5 cm

H
5 cm
4 cm

Pairs of similar triangles:

☐ and ☐ , ☐ and ☐ , ☐ and ☐

Pair of congruent triangles: ☐ and ☐

2. Find the unknown lengths.

(a)
8
6   7
x
12
y

x = ☐   y = ☐

(b)
8 m
b
15 m
5 m

b = ☐

(c)
40
28
32
m
n
21

m = ☐   n = ☐

(d)
25
d
20
16
d = ☐

(e)
20   28
30
24
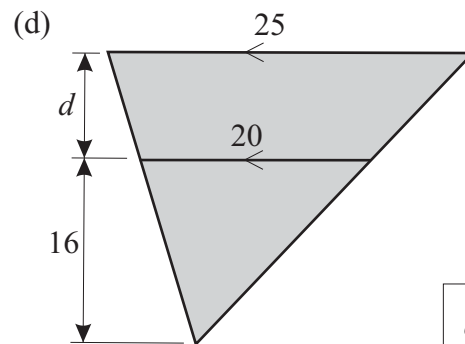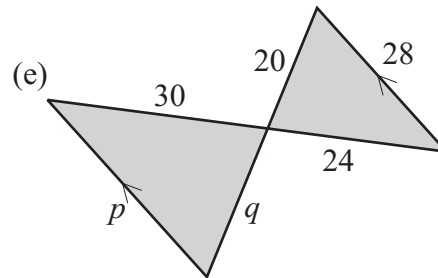p   q
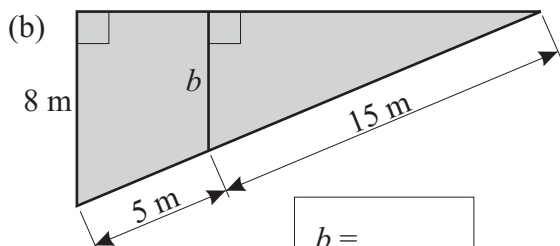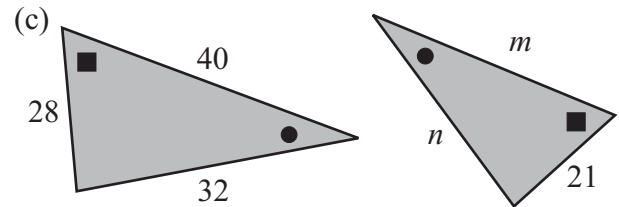
p = ☐

q = ☐

3. Michael was standing near a camp fire at night and noticed his shadow, cast from the fire onto a nearby tree, was the same height as the tree. Michael is 170 cm tall and measured that he was 2 paces from the fire and 18 paces from the tree.
Find the height of the tree in metres.

☐