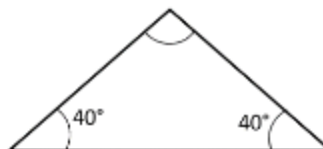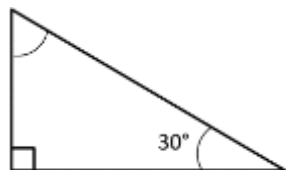Name: _____

Unit 4 – Geometry
4.5B – Similar Triangles

The inside angles of a triangle always add up to $180°$.

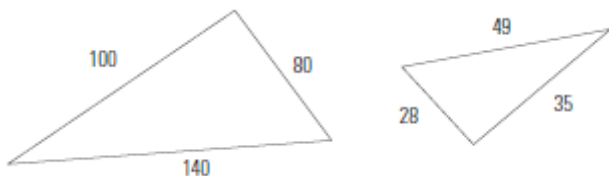Find the measures of the missing angles:

Two triangles are similar if:
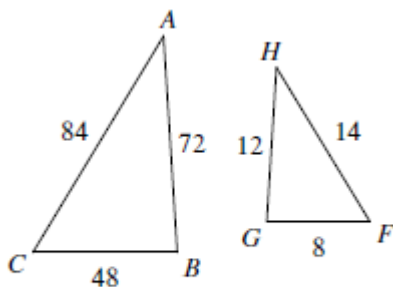
      The corresponding angles are equal   **AND**   The ratios of the corresponding side lengths are equal
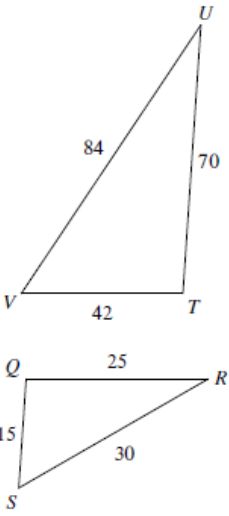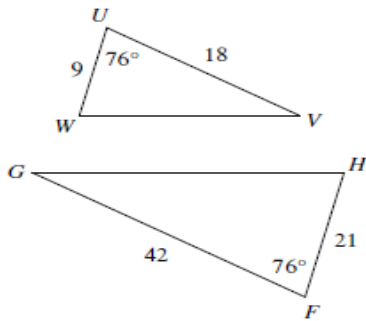
Are the following triangles similar?
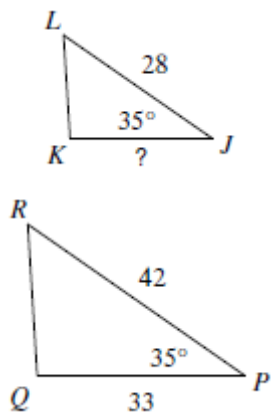
1.

2.

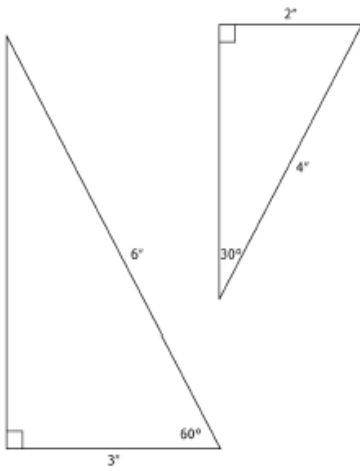$\triangle CBA \sim$ _____

3.

84 70 U

V 42 T

Q 25 R

15 30

S

4. If the following triangles are similar, find the lengths of the missing sides.

U
9 76° 18
W V

G H
42 21
76°
F

5. If the following triangles are similar, find the lengths of the missing sides.

L
28
35°
K ? J

R
42
35°
Q 33 P

Assignment

1. Are the triangles similar? If they are similar, find the lengths of the missing sides.

2. The following triangles are similar. Find the value of *x*.
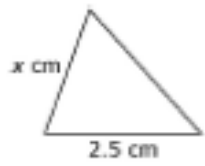
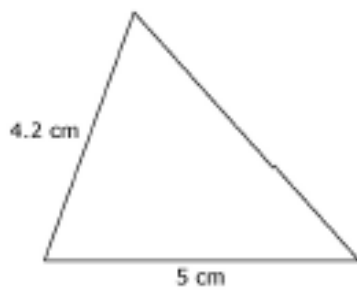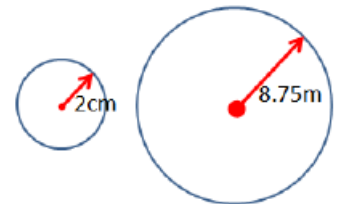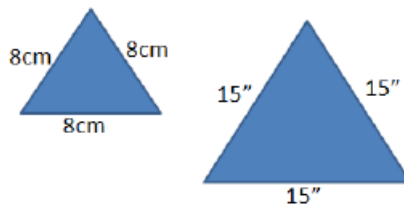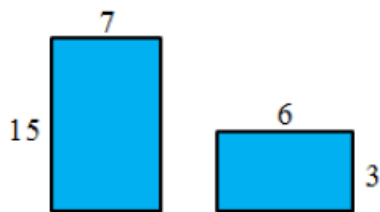3. Are the followings pairs of shapes similar or not?

4. Given that the following triangles are similar, find the length of side x.