Properties of Similar Figures Notes

Name _____
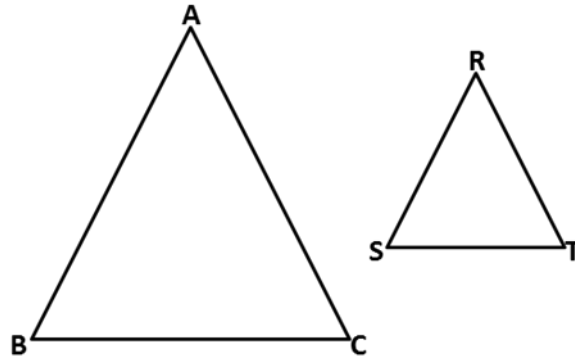

Vocabulary	Definition	In the Diagram Above
Similar Polygons	two polygons are similar if their corresponding angles are equal and their corresponding side lengths proportional. the symbol "~" means "is similar to"	
Congruent	two polygons are congruent if they are exactly the same – same shape and same size. In congruent figures, corresponding side lengths are equal and corresponding angles are equal. the symbol "≅" means "is congruent to"	
Corresponding Angles	matching angles of two or more polygons	
Corresponding Sides	matching sides of two or more polygons	
Statement of Proportionality	Used to show that corresponding sides in similar polygons have the same ratio	

To determine if two polygons are *similar*, they must:
1) be the same shape, but different sizes
2) have congruent corresponding angles
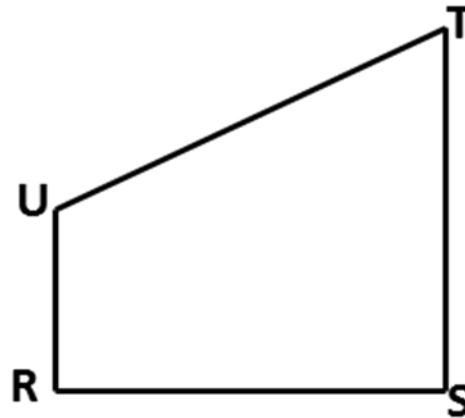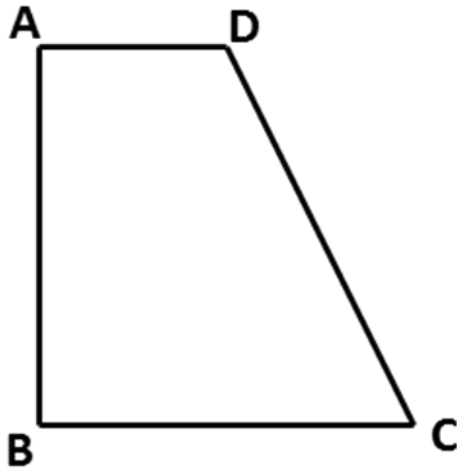3) have proportional corresponding sides

Determine if the figures are similar.

Is △DEF ~ △JKL?
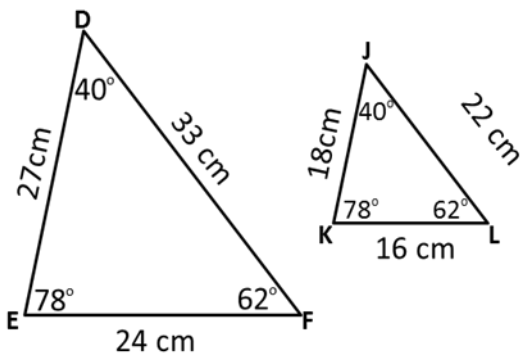
1) In the figure above, trapezoid ABCD ≅ RSTU.

Determine the four corresponding sides:

_____   _____   _____   _____

Determine the four corresponding angles:

_____   _____   _____   _____

Determine if the figures below are similar by using a statement of proportionality.

2)

3)