# Similarity/Dilation Unit Test Topics - Dec 6-9, 2017

#### Calculator Allowed

Know definition for similar polygons. Recognize similar figures by definition and write a similarity statement.

Know that congruence is just similarity with a 1 to 1 ratio.

Create a dilation of a polygon, figure, or segment using a scale factor and center. Or find the center of a dilation and its scale factor given similar figures.

Write and solve proportions from sketches, words, or just algebraically.

Know and use triangle midsegment conjectures from pp 273-4.

Know triangle similarity shortcuts SSS, SAS, and AA and use to support an argument for similar triangles.

Apply parallel proportionality conjectures on pp 605-6 to find unknown segments between parallel lines of triangles AND know when you cannot use these conjectures (like 1-3 on p 607).

Recognize similar right triangles formed by altitude from right angle and find missing lengths with proportions.

Know what happens to the similarity ratio of two figures when you change dimensions to area or volume: give a new ratio given one of the three AND be able to use the correct ratio and a proportion to solve for a missing side, volume, or area.

First part of test is T/F and Multiple Choice on Tues-Wed (about 20 min). Thurs-Fri is writing and solving proportions AND dilations.

### Similarity/Dilation Unit Test Topics - Dec 6-9, 2017

### Calculator Allowed

Know definition for similar polygons. Recognize similar figures by definition and write a similarity statement.

Know that congruence is just similarity with a 1 to 1 ratio.

Create a dilation of a polygon, figure, or segment using a scale factor and center. Or find the center of a dilation and its scale factor given similar figures.

Write and solve proportions from sketches, words, or just algebraically.

Know and use triangle midsegment conjectures from pp 273-4.

Know triangle similarity shortcuts SSS, SAS, and AA and use to support an argument for similar triangles.

Apply parallel proportionality conjectures on pp 605-6 to find unknown segments between parallel lines of triangles AND know when you cannot use these conjectures (like 1-3 on p 607).

Recognize similar right triangles formed by altitude from right angle and find missing lengths with proportions.

Know what happens to the similarity ratio of two figures when you change dimensions to area or volume: give a new ratio given one of the three AND be able to use the correct ratio and a proportion to solve for a missing side, volume, or area.

First part of test is T/F and Multiple Choice on Tues-Wed (about 20 min). Thurs-Fri is writing and solving proportions AND dilations.

### Similarity/Dilation Unit Test Topics - Dec 6-9, 2017

#### Calculator Allowed

Know definition for similar polygons. Recognize similar figures by definition and write a similarity statement.

Know that congruence is just similarity with a 1 to 1 ratio.

Create a dilation of a polygon, figure, or segment using a scale factor and center. Or find the center of a dilation and its scale factor given similar figures.

Write and solve proportions from sketches, words, or just algebraically.

Know and use triangle midsegment conjectures from pp 273-4.

Know triangle similarity shortcuts SSS, SAS, and AA and use to support an argument for similar triangles.

Apply parallel proportionality conjectures on pp 605-6 to find unknown segments between parallel lines of triangles AND know when you cannot use these conjectures (like 1-3 on p 607).

Recognize similar right triangles formed by altitude from right angle and find missing lengths with proportions.

Know what happens to the similarity ratio of two figures when you change dimensions to area or volume: give a new ratio given one of the three AND be able to use the correct ratio and a proportion to solve for a missing side, volume, or area.

First part of test is T/F and Multiple Choice on Tues-Wed (about 20 min). Thurs-Fri is writing and solving proportions AND dilations.

## Similarity/Dilation Unit Test Topics - Dec 6-9, 2017

#### Calculator Allowed

Know definition for similar polygons. Recognize similar figures by definition and write a similarity statement.

Know that congruence is just similarity with a 1 to 1 ratio.

Create a dilation of a polygon, figure, or segment using a scale factor and center. Or find the center of a dilation and its scale factor given similar figures.

Write and solve proportions from sketches, words, or just algebraically.

Know and use triangle midsegment conjectures from pp 273-4.

Know triangle similarity shortcuts SSS, SAS, and AA and use to support an argument for similar triangles.

Apply parallel proportionality conjectures on pp 605-6 to find unknown segments between parallel lines of triangles AND know when you cannot use these conjectures (like 1-3 on p 607).

Recognize similar right triangles formed by altitude from right angle and find missing lengths with proportions.

Know what happens to the similarity ratio of two figures when you change dimensions to area or volume: give a new ratio given one of the three AND be able to use the correct ratio and a proportion to solve for a missing side, volume, or area.

First part of test is T/F and Multiple Choice on Tues-Wed (about 20 min). Thurs-Fri is writing and solving proportions AND dilations.