

Our Unit Organizer

The Big Picture: Relationships Between Numbers

Unit 1/11 - 1/31

Name: _____

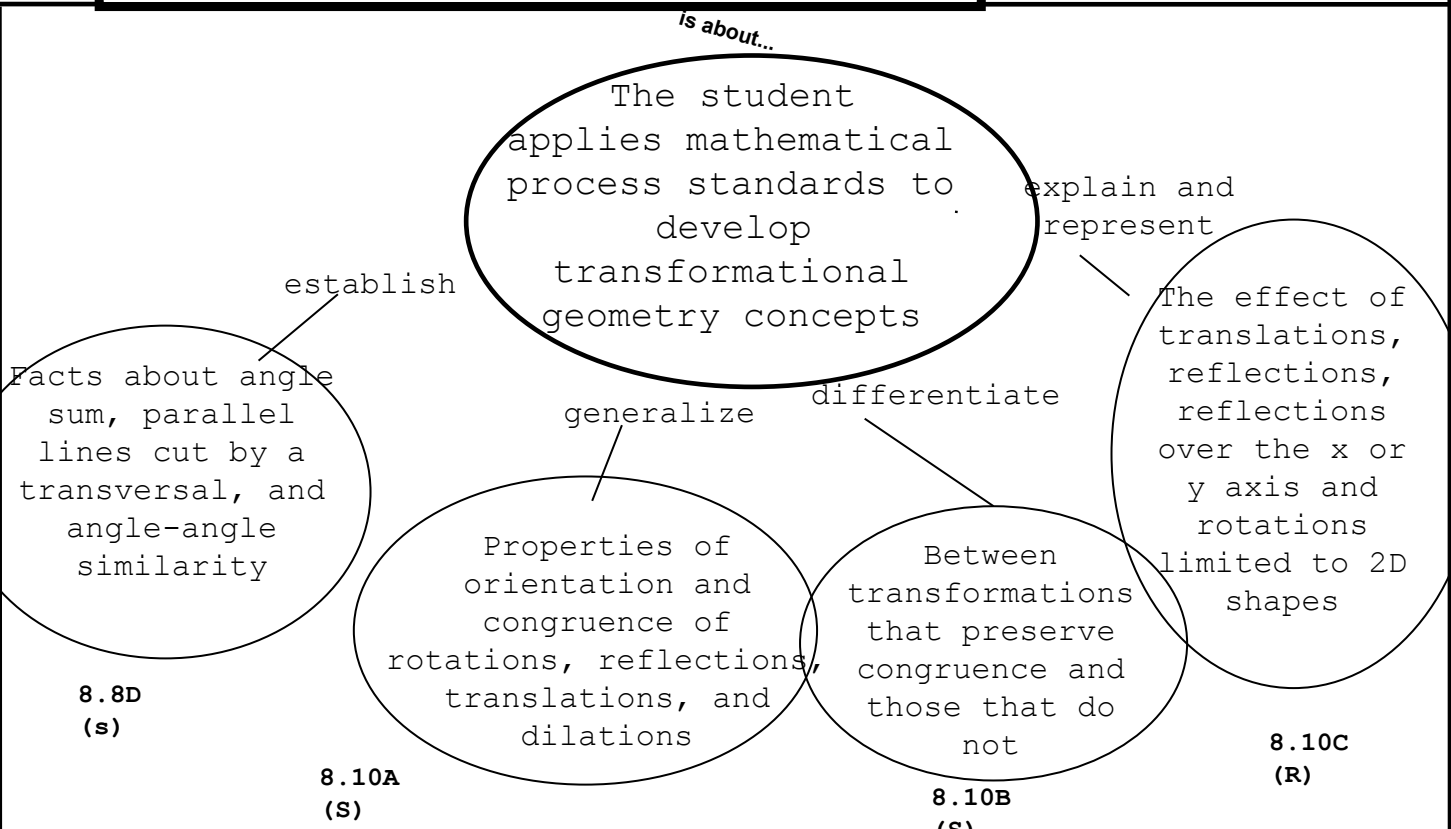
Linear Functions: Proportional Relationships

UNIT 7: Angles and Transformations

→ NEXT Dilations and Similarity

SCHEDULE

11	Angles
17	Translations
22	Reflections
24	Rotations
28	Transformations
30	Review



31 Test Day
Essential Questions:

Buzz Words

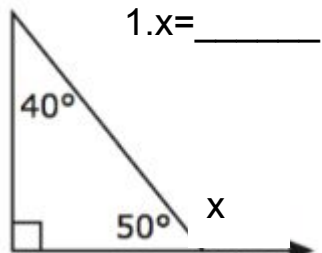
- How are angle relationships used to find missing measurements?
- What are the properties of orientation and congruence of rotations, reflections and translations?

1	2	3	center of rotation	1	2	3	origin
1	2	3	clockwise	1	2	3	x-axis
1	2	3	reflection	1	2	3	y-axis
1	2	3	rotation	1	2	3	complementary angle
1	2	3	transformation	1	2	3	supplementary angles
1	2	3	translation	1	2	3	vertical angle
1	2	3	origin	1	2	3	transversal

Our Unit Organizer UNIT 7: Angles and Transformations

Expanded Map

TYPE OF ROTATION	Point of the pre-image (Before reflection)	Point of the image (After reflection)
Rotation of 90° (clock wise)	(x, y)	$(y, -x)$
Rotation of 90° (counter clock wise)	(x, y)	$(-y, x)$
Rotation of 180° (clock wise & counter clock wise)	(x, y)	$(-x, -y)$
Rotation of 270° (clock wise)	(x, y)	$(-y, x)$



The student applies mathematical process standards to develop transformational geometry concepts

Facts about angle sum, parallel lines cut by a transversal, and angle-angle similarity

8.8D (S)

establish

explain represent

The effect of translations, reflections, reflections over the x or y axis and rotations limited to 2D shapes

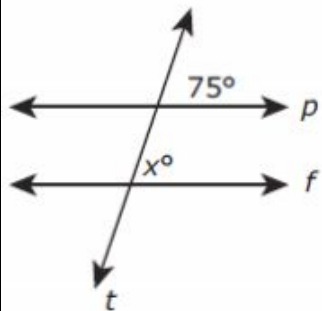
8.10C (R)

generalize differentiate

Properties of orientation and congruence of rotations, reflections, translations, and dilations

Between transformations that preserve congruence and those that do not

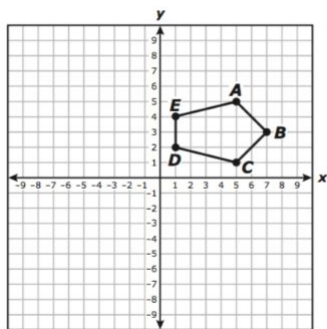
8.10B (S)



8.10A (S)

3. Translate this figure 5 down, 3 left

4.



2. $x = \underline{\hspace{2cm}}$

Reflections across the x-axis	$(x, -y)$	$(1, 2) \rightarrow$
Reflections across the y-axis	$(-x, y)$	$(1, 2) \rightarrow$