

Name:

Teacher:

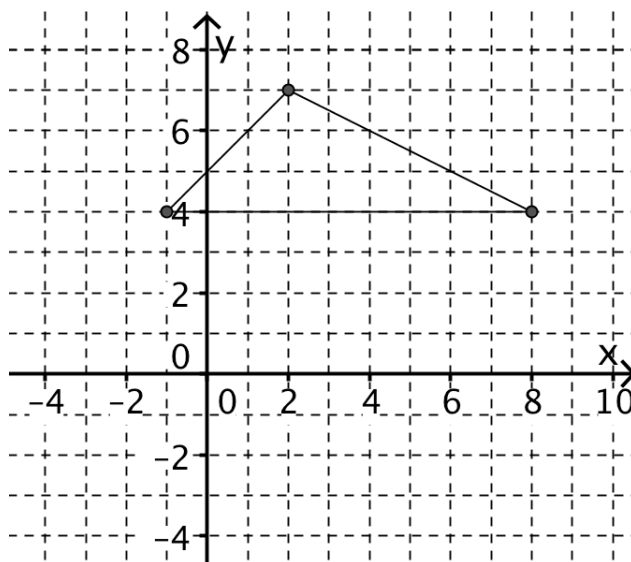
Date:

Period:



Inequalities Learning Targets

A-REIc: *I can represent and solve equations and inequalities graphically.*



Write the linear function and domain of the line segment.

Linear Function	Domain
$y = x + 5$	$-1 \leq x \leq 2$

What is the range of the triangle in the interior?

3. Draw the line with the given domain.

Linear Function	Domain
$y = -1$	$-1 \leq x \leq 8$
$y = -\frac{5}{4}x + 9$	$4 \leq x \leq 8$
$5x - y = -4$	$-1 \leq x \leq 0$
$y = 4$	$-1 \leq x \leq 8$

4. Color in the quadrilateral in the interior. What is the range of the quadrilateral?

5. Use technology to check your line segments - use a TI-84 or www.geogebra.org www.desmos.com
- Check the triangle.
 - Check the quadrilateral.



6. Use technology to rewrite the linear function as an inequality that represents the shaded region.

Linear Function	Inequality
$y = x + 5$	$y \leq x + 5$
$y = -\frac{1}{2}x + 8$	
$y = 4$	
$y = -1$	
$y = -\frac{5}{4}x + 9$	
$5x - y = -4$	

7. Make your own design similar to mine with 12 or fewer lines.
You need to turn in the directions and the drawing on graph paper.

Linear Function	Domain	Inequality