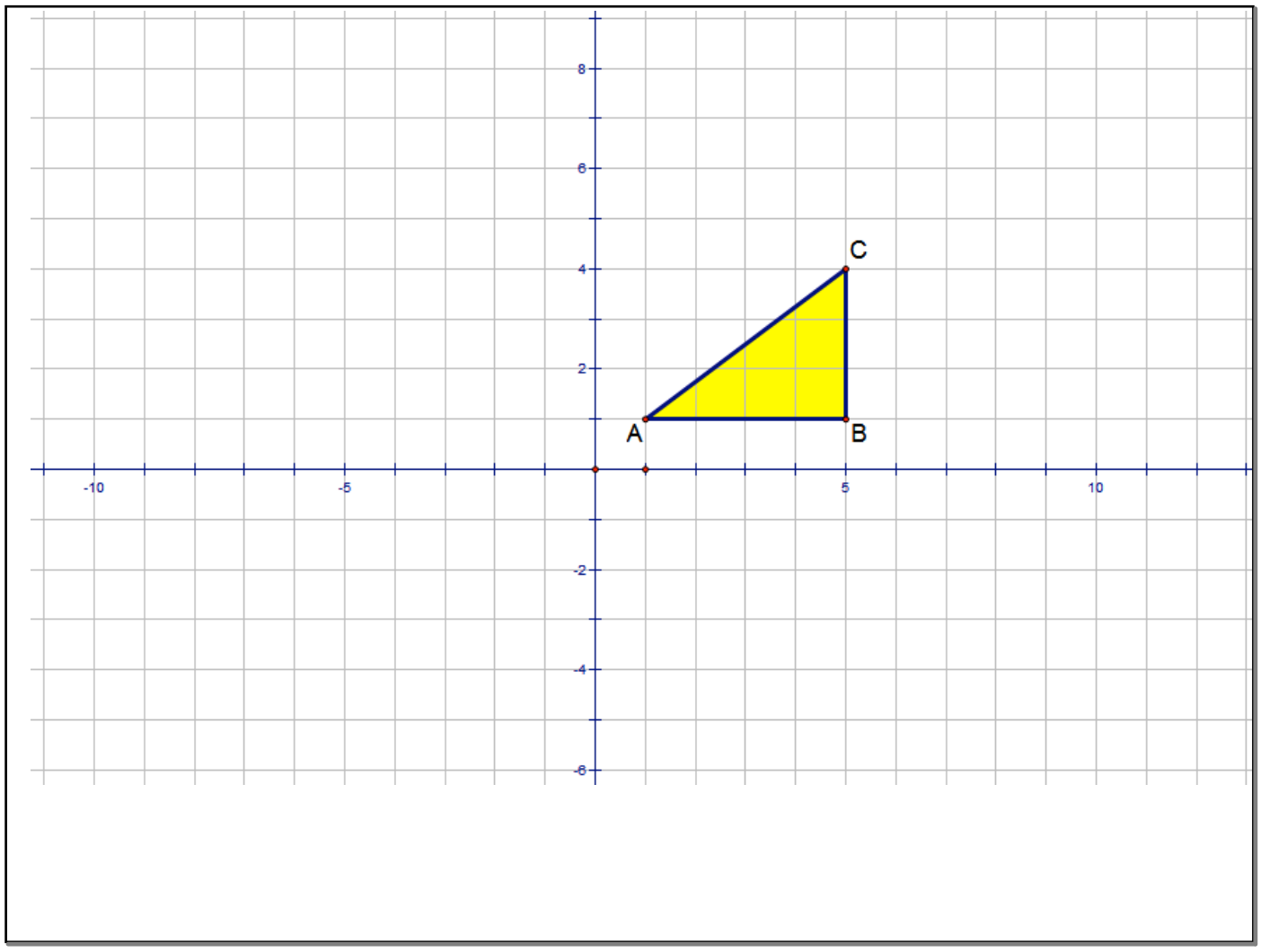
April 28, 2014



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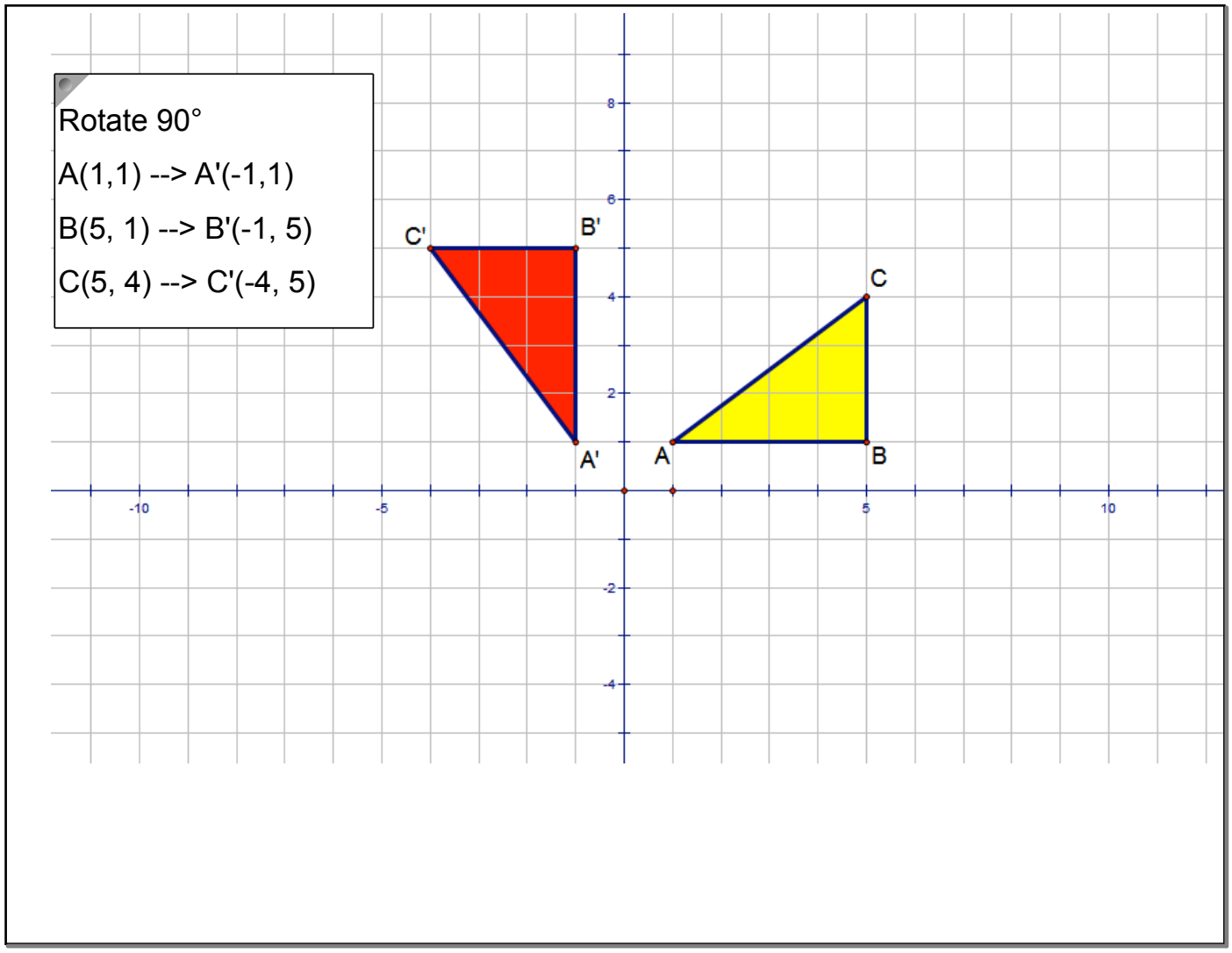
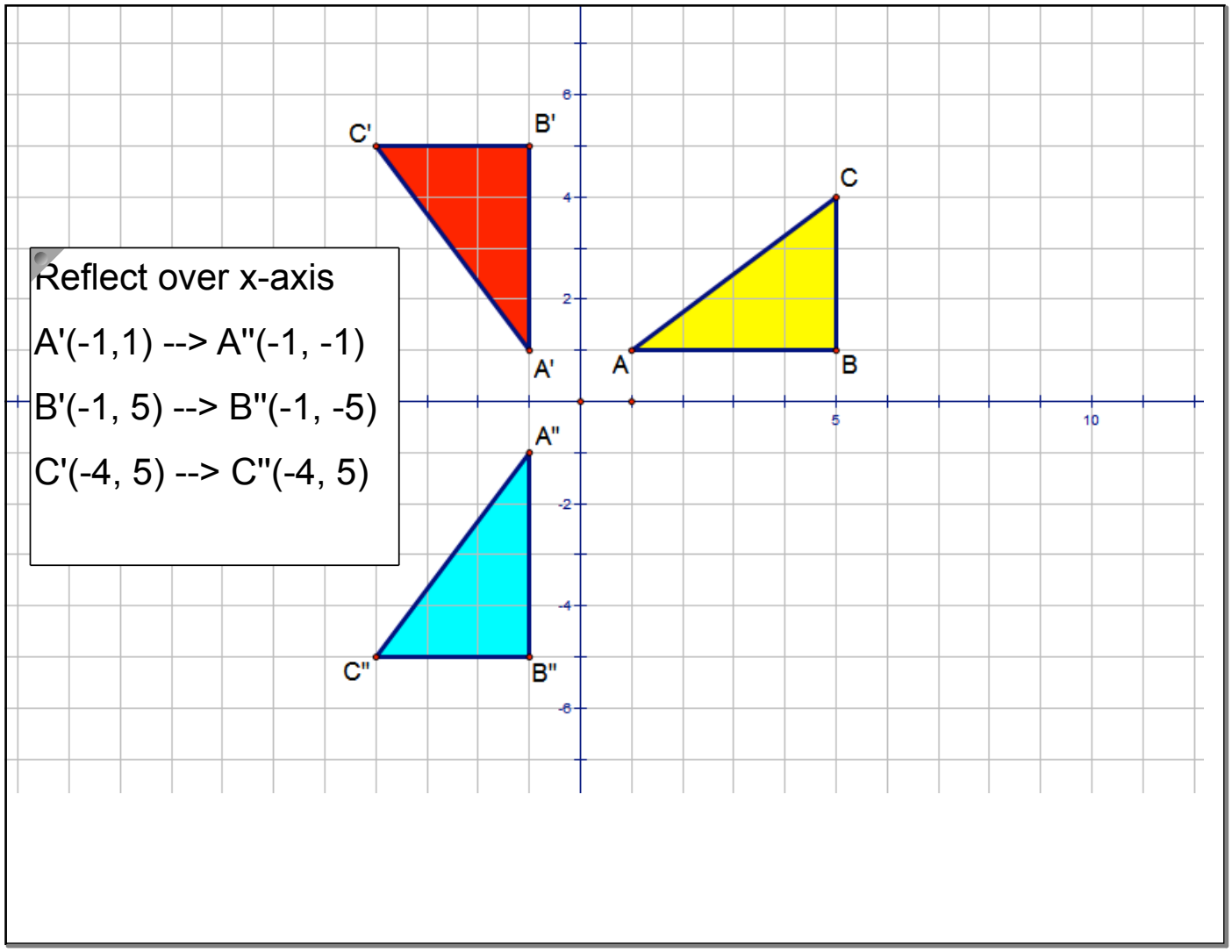
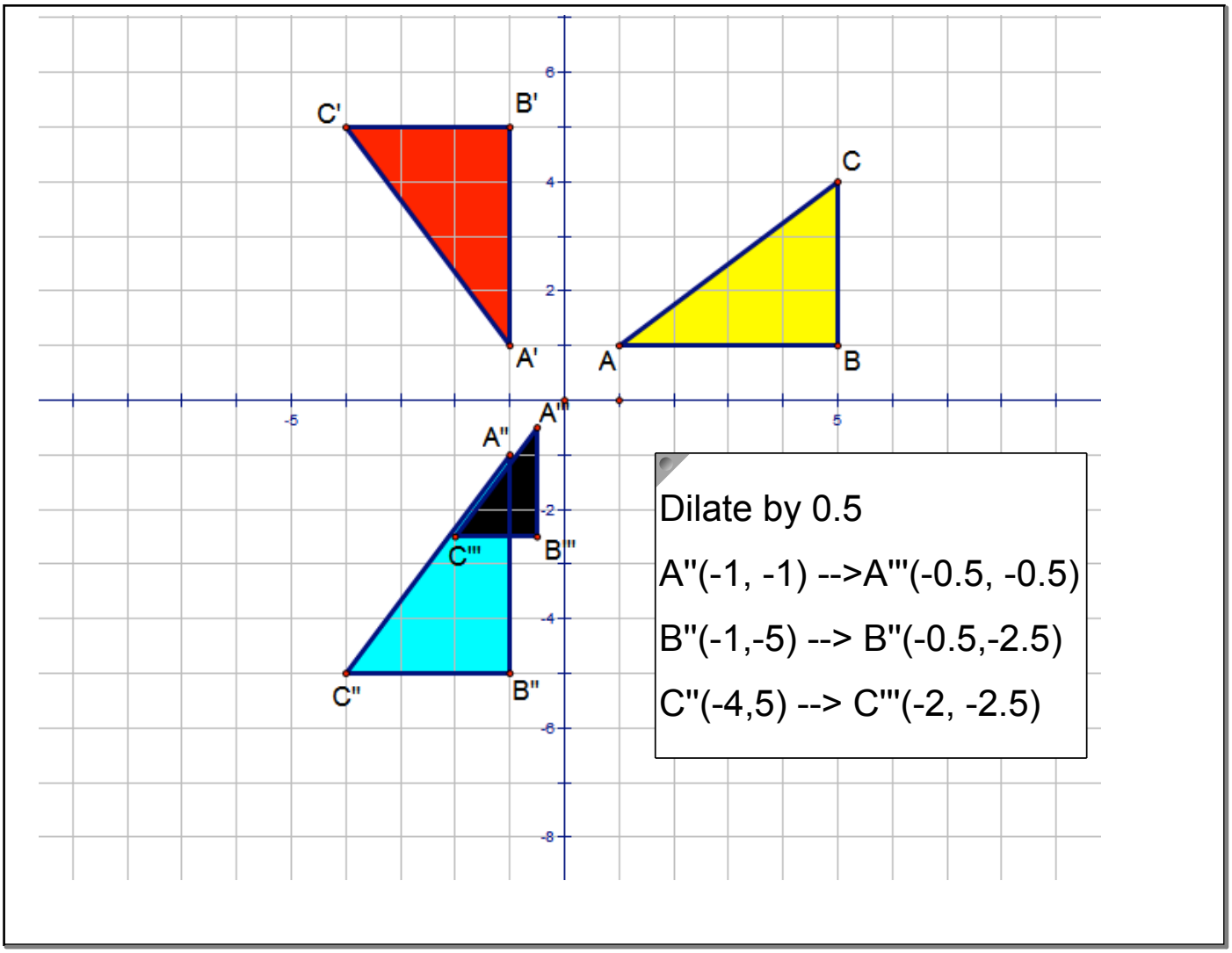
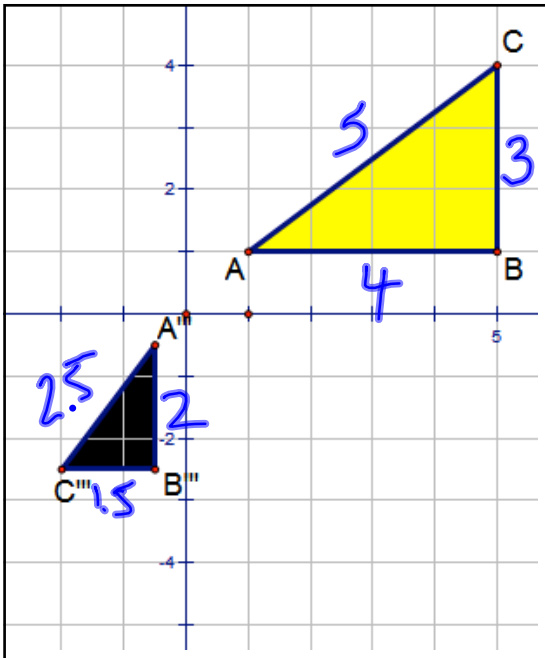


April 28, 2014



April 28, 2014





A(1, 1) -->A'''(-0.5, -0.5)

B(5,1) --> B''(-0.5,-2.5)

C(5, 4) --> C'''(-2, -2.5)

$\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$	$\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$
$\sqrt{(5-1)^2+(4-1)^2}$	$\sqrt{(-2--0.5)^2+(-2.5--0.5)^2}$
$\sqrt{(4)^2+(3)^2}$	$\sqrt{(-1.5)^2+(-2)^2}$
$\sqrt{16+9}$	$\sqrt{2.25+4}$
$\sqrt{25}$	$\sqrt{6.25}$
5	2.5

$$\frac{AB}{A'B'}=\frac{BC}{B'C'}=\frac{AC}{A'C'}$$

$$\frac{4}{2}=\frac{3}{1.5}=\frac{5}{2.5}$$

$2=2=2$ ✓

$\therefore \Delta ABC \sim \Delta A'''B'''C'''$ b/c of SSS~.

DIRECTIONS:

1) Graph any triangle ABC.

2) Perform AT LEAST 3 transformations on triangle ABC, one of which must be a dilation.

3) Clearly indicate each step and state the new coordinates after each transformation.

4) Verify that your **starting triangle** and your **final triangle** are similar using the SSS~ postulate.
**You will have to use the distance formula! Be sure to show all of your work!