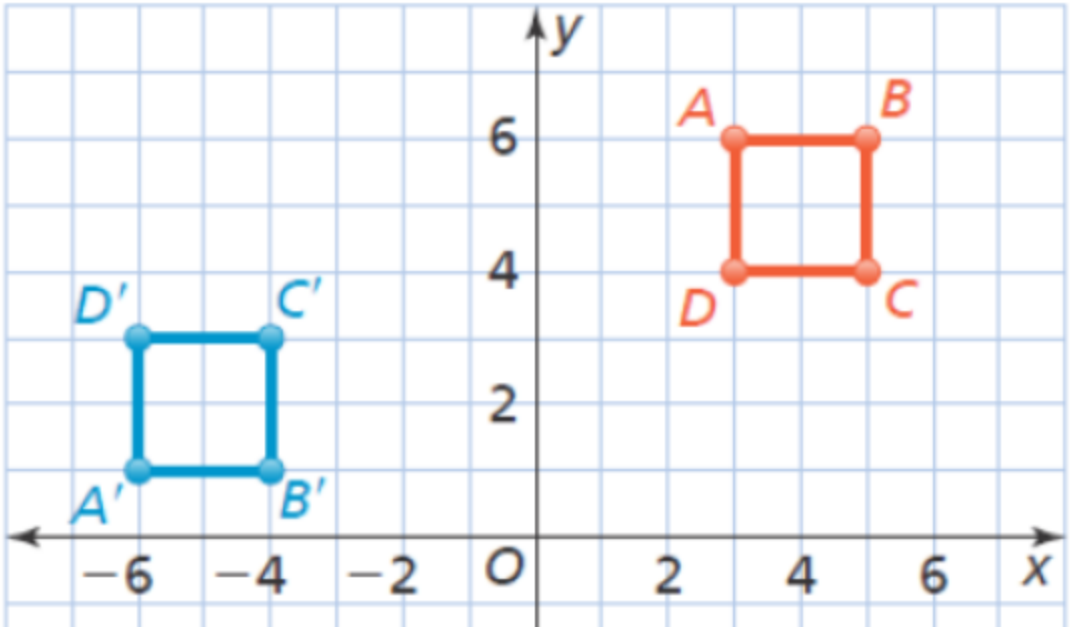
Name:	Period:

Unit 9 Practice Test

Calculators OK

Question 01.

Figure $ABCD$ is congruent to Figure $A'B'C'D'$. Select **all** true statements below.



a) $ABCD \cong A'B'C'D'$

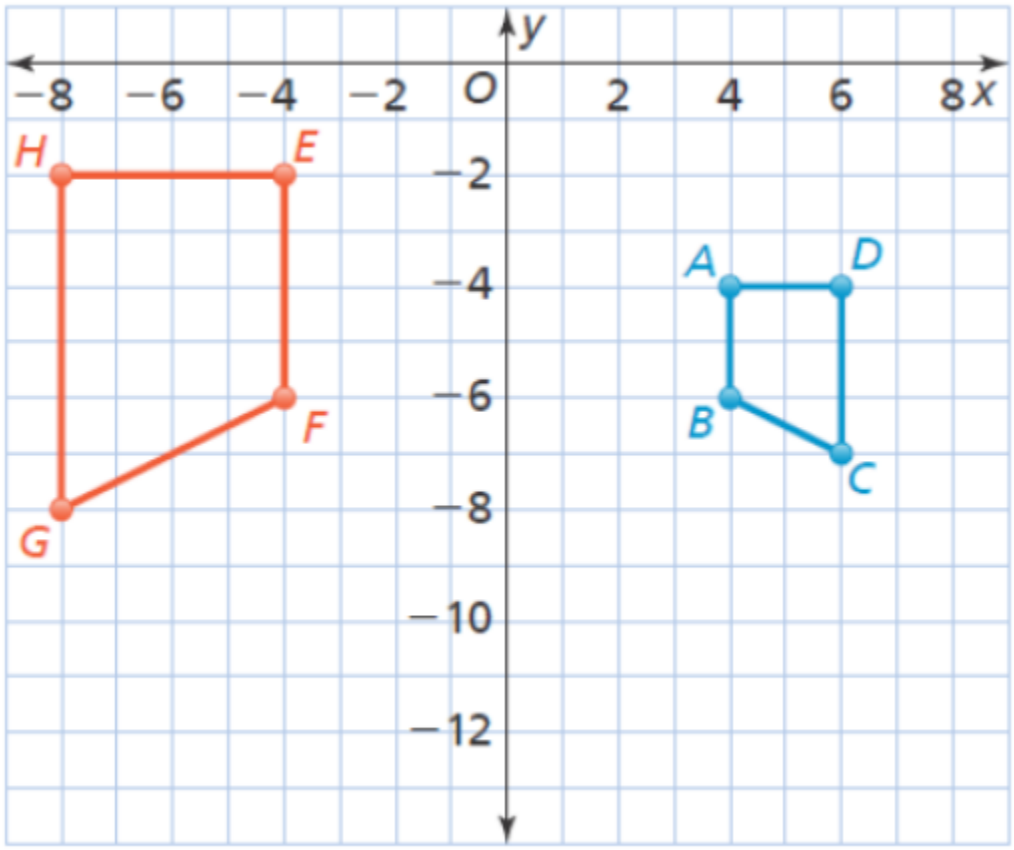
b) $ABCD$ has the same area as $A'B'C'D'$

c) $ABCD$ has the same perimeter as $A'B'C'D'$

d) A series of translations, reflections and/or rotations could map $ABCD$ onto $A'B'C'D'$.

Question 02.

Figure $ABCD$ is similar to Figure $EFGH$. Select **all** true statements below.



a) $ABCD \cong EFGH$

b) $ABCD \sim EFGH$

c) $ABCD \sim GHEF$

d) Angle A is the same measure as Angle E

e) Angle B is the same measure as Angle F

f) Angle C is the same measure as Angle H

g) A series of translations, reflections and/or rotations could map $ABCD$ onto $EFGH$.

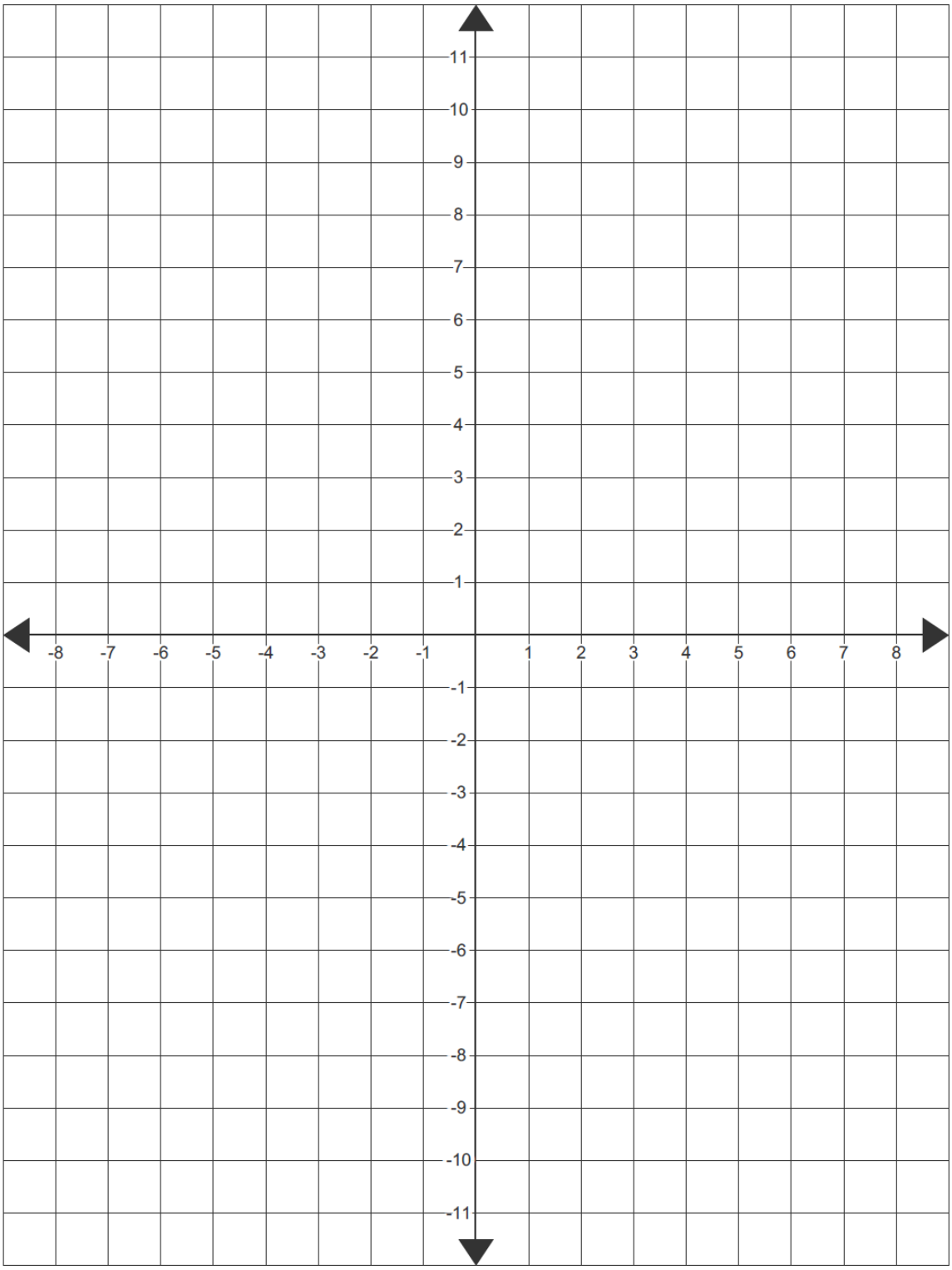
h) A series of translations, reflections, rotations and/or **dilations** could map $ABCD$ onto $EFGH$.

Question 03.

Step 1. Draw a triangle with the following vertices: $A\ (-4, 7);\ B\ (-2, 3);\ C\ (-2, 7)$

Step 2. Translate triangle ABC six units right and draw triangle $A'B'C'$

Step 3. Translate triangle $A'B'C'$ ten units down and draw triangle $A''B''C''$

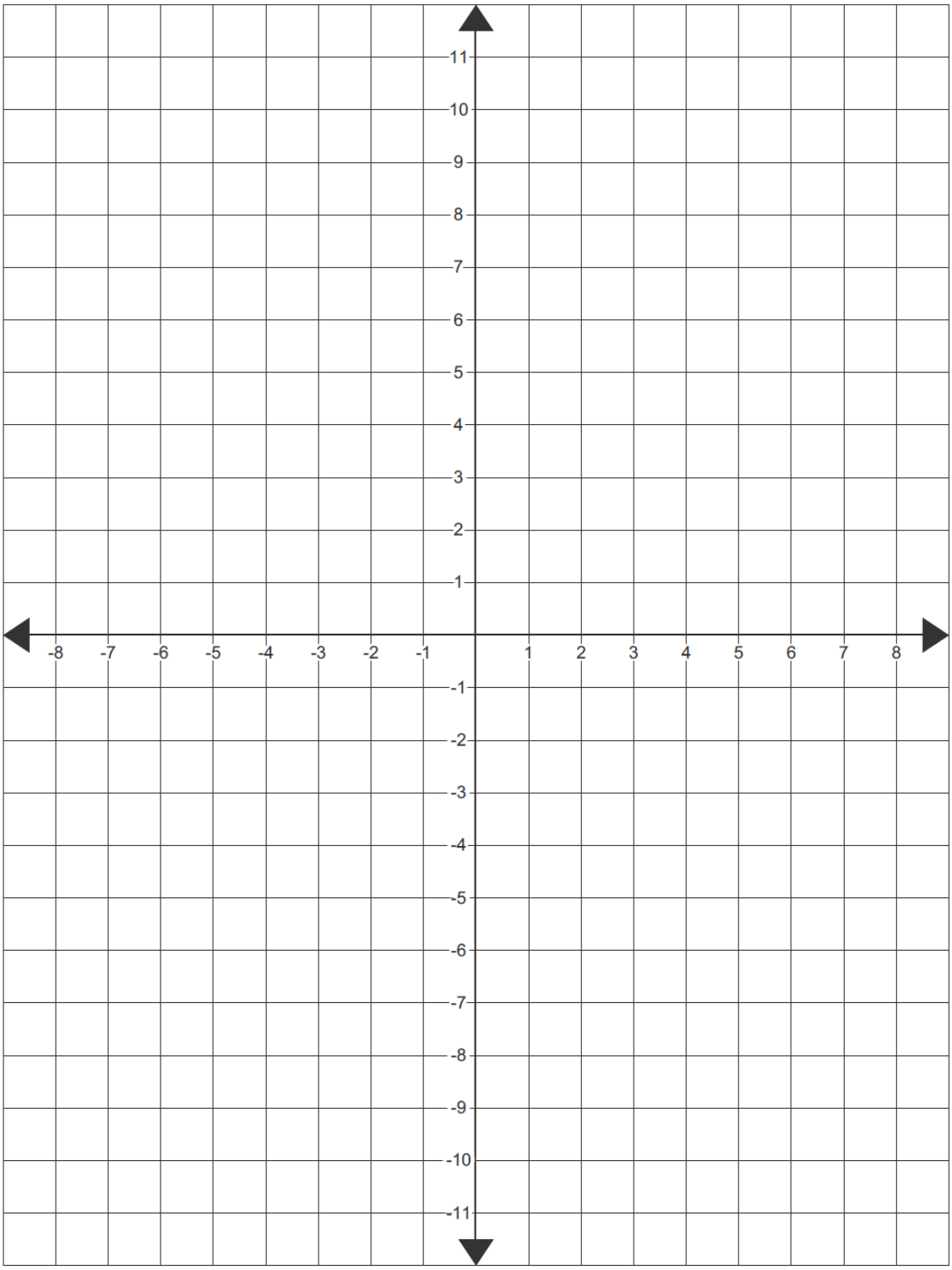


Question 04.

Step 1. Draw a triangle with the following vertices: $X\ (-8, 3);\ Y\ (-4, 3);\ Z\ (-4, 5)$

Step 2. Reflect triangle XYZ across the y-axis and draw triangle $X'Y'Z'$

Step 3. Reflect triangle $X'Y'Z'$ across $y = -1$ and draw triangle $X''Y''Z''$

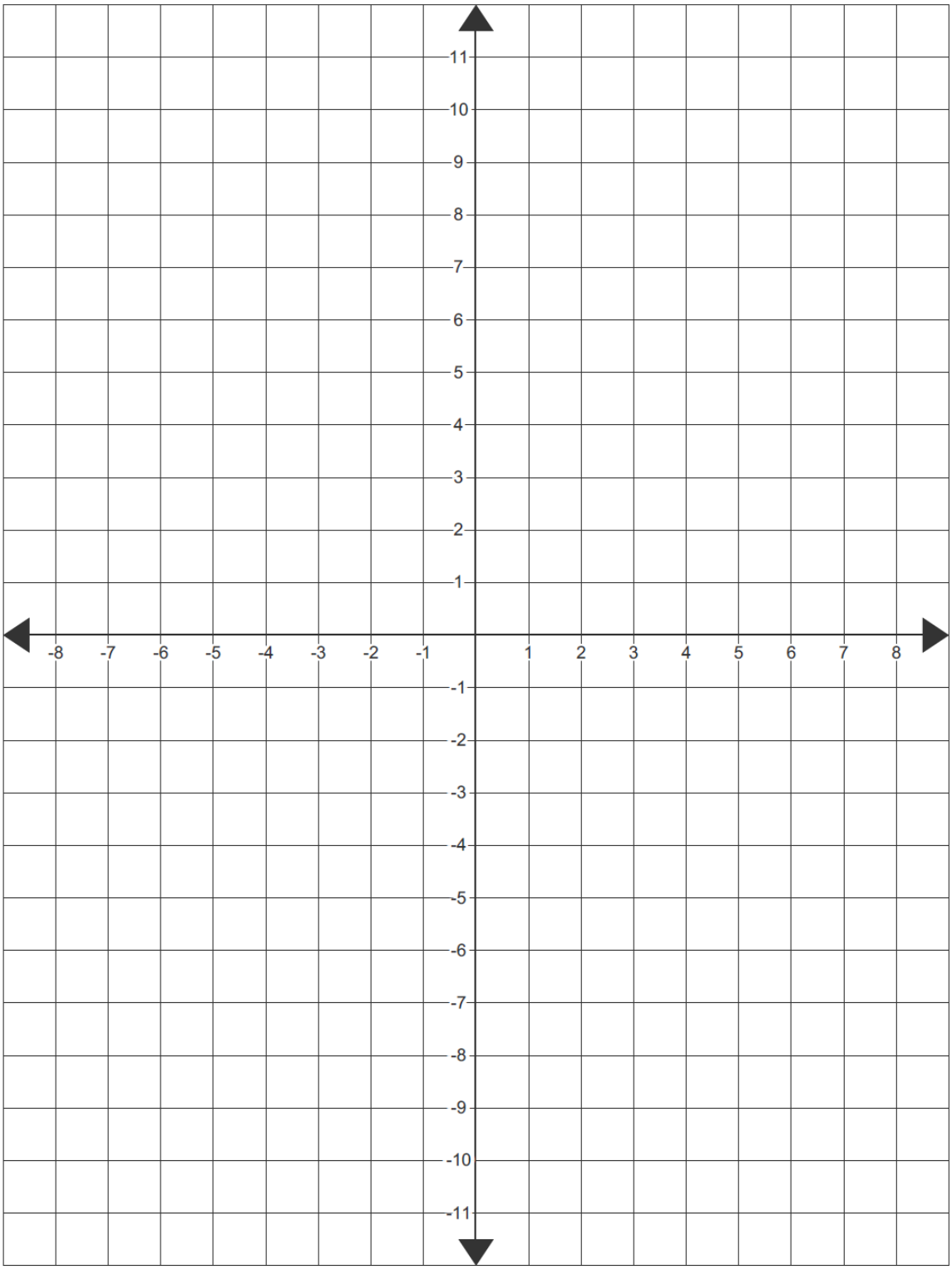


Question 05.

Step 1. Draw a triangle with the following vertices: $R\ (-2, 3); S\ (-2, 5);\ T\ (-6, 3)$

Step 2. Rotate triangle RST clockwise 90° about the origin and draw triangle $R'S'T'$

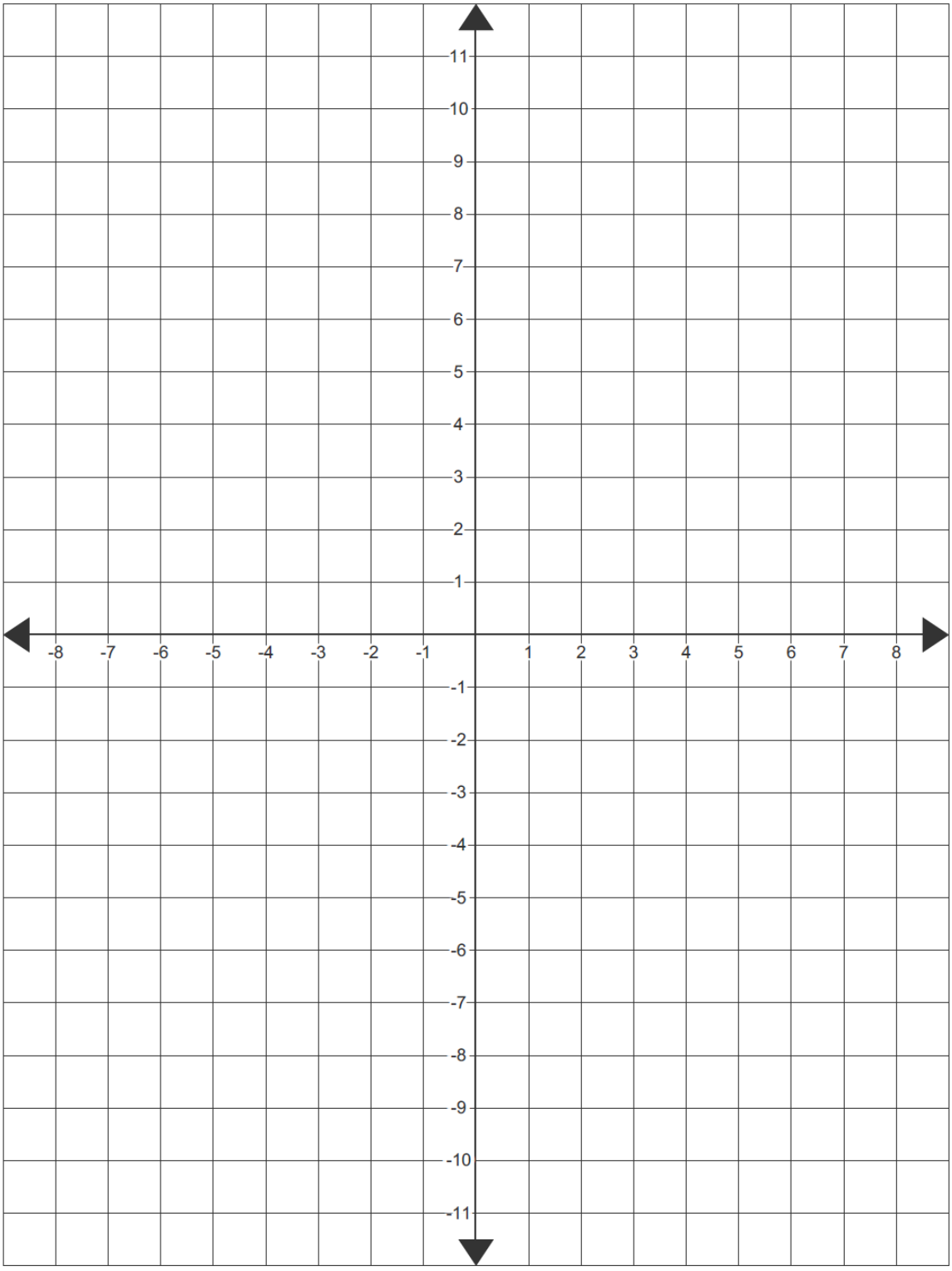
Step 3. Rotate triangle $R'S'T'$ clockwise 90° about the origin and draw triangle $R''S''T''$



Question 06.

Step 1. Draw a triangle with the following vertices: $E\ (1,1);\ F\ (1,3);\ G\ (2,1)$

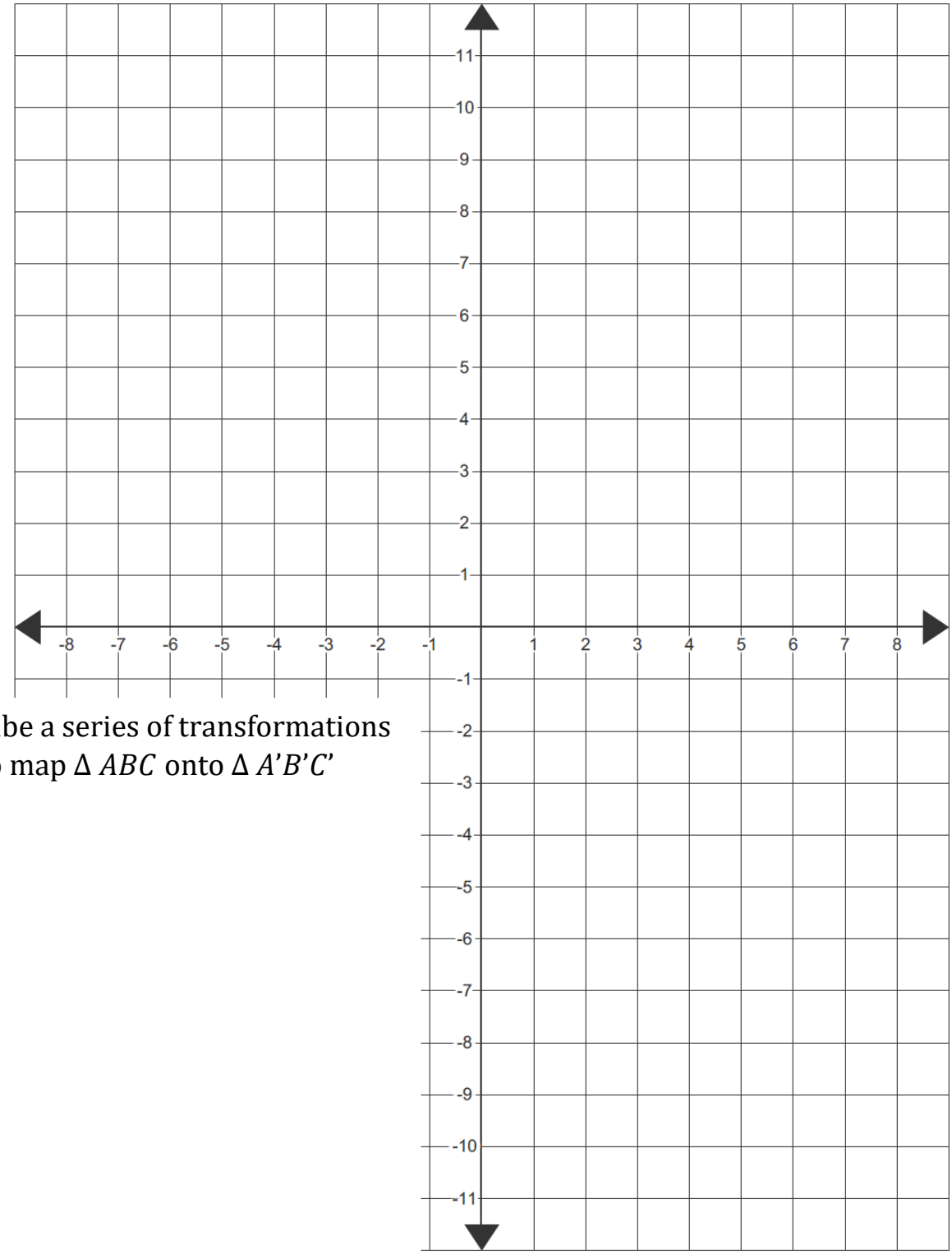
Step 2. Dilate triangle EFG by factor of 3 about the origin and draw triangle $E'F'G'$



Question 07.

Triangle ABC has vertices: $A\ (-6, 8);\ B\ (-6, 2);\ C\ (-2, 2)$

Triangle $A'B'C'$ has vertices: $A'(8, -8);\ B'(5, -8);\ C'\ (5, -6)$



Describe a series of transformations to map $\Delta\ ABC$ onto $\Delta\ A'B'C'$