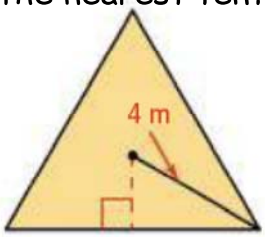
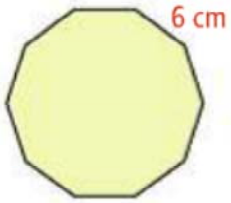
Geometry 2nd Semester Week 12 Tuesday Warm-up

1. Find the area and perimeter to the nearest tenth.

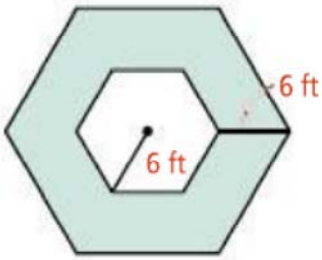


Find area to nearest tenth.

2.



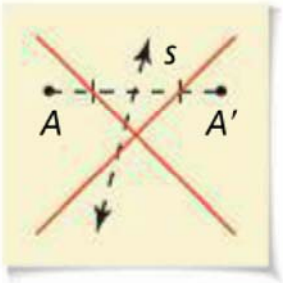
3. **The polygons are regular polygons. Find the area of the shaded region.**



4. Vocabulary What is the relationship between a line of reflection and a segment joining corresponding points of the preimage and image?

5. Error Analysis A classmate sketched $R_s(A) = A'$ as shown in the diagram.

a. Explain your classmate's error.

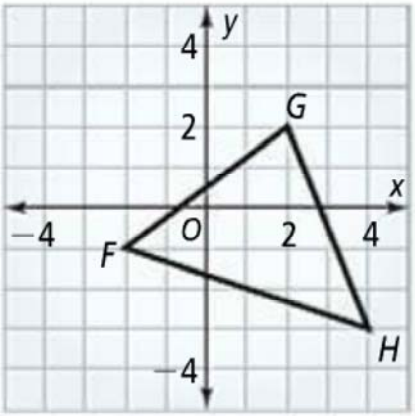


35. Reasoning When you reflect a figure across a line, does every point on the preimage move the same distance? Explain.

Geometry 2nd Semester Week 12 Block Day Warm-up

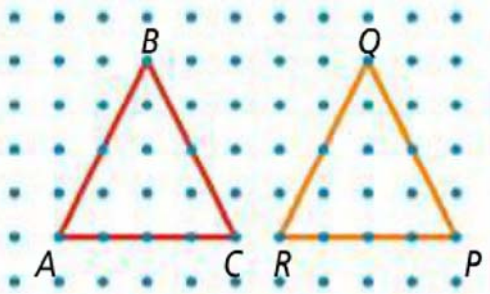
Use the graph of $\triangle FGH$.

1. What are the coordinates of $R_{y\text{-axis}}(H)$?
2. What are the coordinates of $R_{x=3}(G)$?
3. Graph and label $R_{y=4}(\triangle FGH)$.



4. Vocabulary What is true about a transformation that is not a rigid motion? Include a sketch of an example.

5. Error Analysis Your friend says the transformation $\triangle ABC \rightarrow \triangle PQR$ is a translation. Explain and correct her error.



22. Think About a Plan $\triangle MUG$ has coordinates $M(2, -4)$, $U(6, 6)$, and $G(7, 2)$. A translation maps point M to $M'(-3, 6)$. What are the coordinates of U' and G' for this translation?

- How can you use a graph to help you visualize the problem?
- How can you find a rule that describes the translation?

28. Reasoning If $T_{<5,\,7>}(\triangle MNO) = \triangle M'N'O'$, what translation rule maps $\triangle M'N'O'$ onto $\triangle MNO$?

Geometry Sem 2 Week 12 Friday Warm-up

Performance Task 3

Copy the graph at the right. On the same set of axes, graph $(T_{<-4,3>} \circ R_{x\text{-axis}})(MNOP)$ and $(R_{x\text{-axis}} \circ T_{<-4,3>})(MNOP)$.

a. Does order matter for this composition of transformations? Explain.

b. Make a conjecture about whether composition of reflections and translations is commutative. Explain your reasoning.