

11 - 5

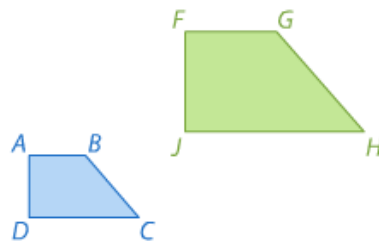
Areas of Similar Figures

Area of Two Similar Polygons

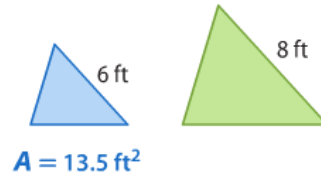
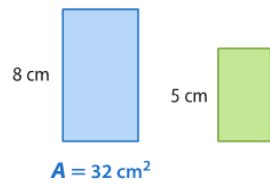
If two polygons are similar, then their areas are proportional to the square of the scale factor between them.

If $ABCD \sim FGHJ$, then

$$\frac{\text{area of } FGHJ}{\text{area of } ABCD} = \left(\frac{FG}{AB}\right)^2.$$



For each pair of similar figures, find the area of the green figure.



For the given figures below, use the Area to find the scale factor from the blue to green figure.

