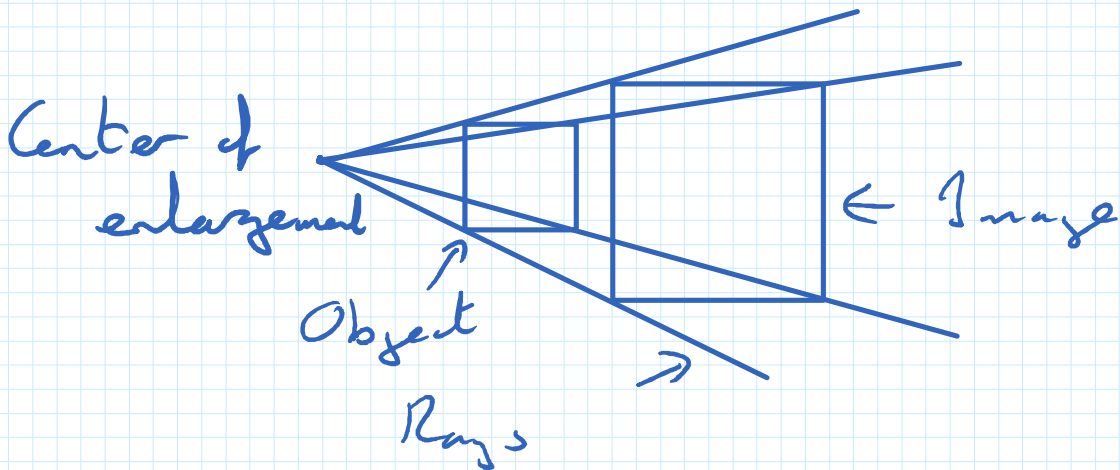


Enlargements.

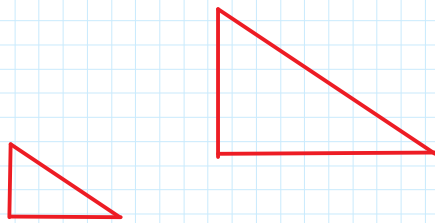


$0 < k < 1 \Rightarrow$ Reduction

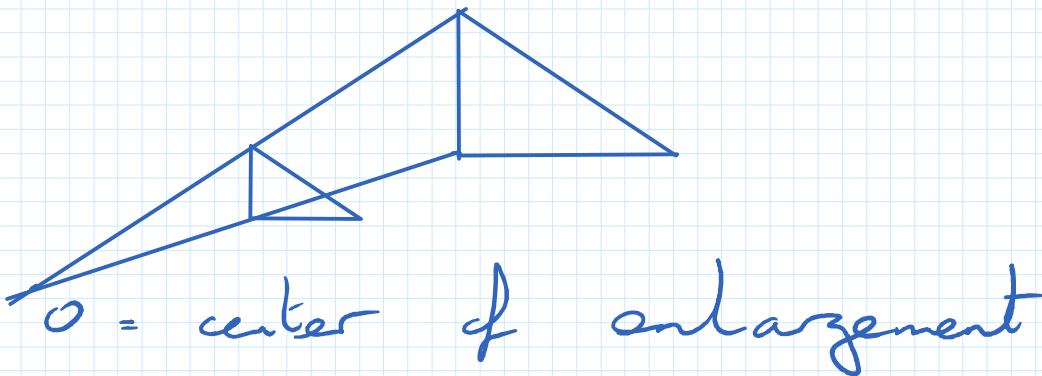
$k > 1 \Rightarrow$ Enlargement

Length of image = k length of object

Area of image = k^2 Area of object



Draw on center of enlargement.



A triangle has lengths that are doubled form an enlarged triangle. Find area of new triangle.

$$k=2$$

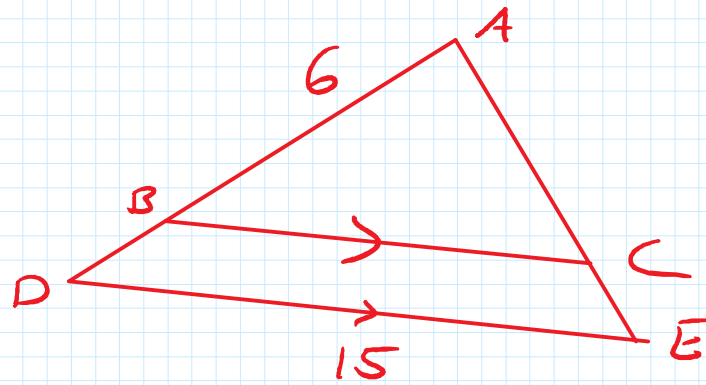
$$\Rightarrow k^2=4$$

Area of new $\Delta = 4$ area of given Δ

If the area of an object is doubled under enlargement find k .

Image = k^2 object.

$$\begin{aligned} \text{Let Object area} &= 1 \Rightarrow \text{Image} = 2 \\ 2 &= k^2 \\ k &= \sqrt{2}. \end{aligned}$$



- (i) Scale factor
(ii) $|BD|$.

(i) $15 : 10 \Rightarrow k = 1.5$

(ii) $|AD| = 6(1.5) = 9$

$|BD| = 3.$