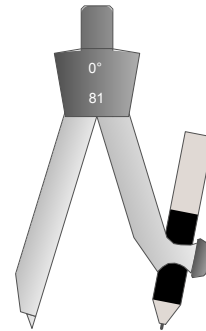
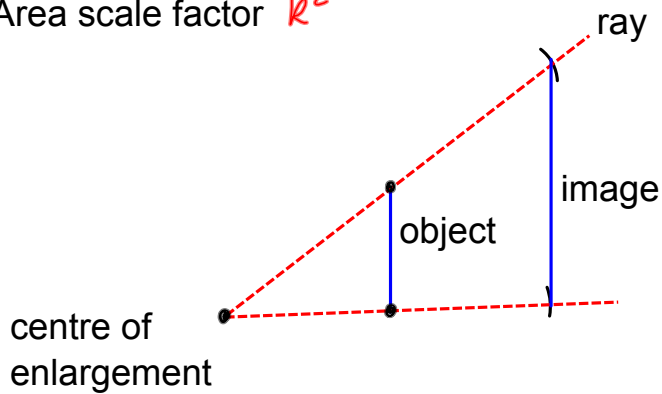


Enlargements

- Scale factor k
- Area scale factor k^2

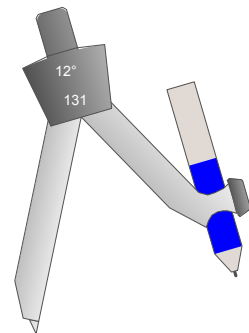
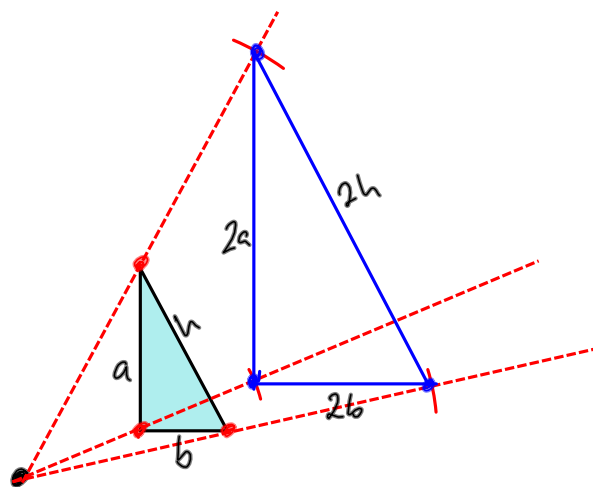


Enlargements are based on similar triangles

Draw a triangle with sides twice the object.

Scale factor $k=2$

Area scale factor = $k^2 = 4$



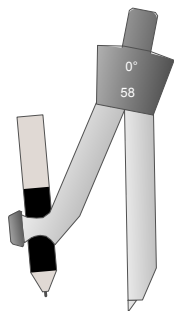
$$\Delta_{\text{small}} = \frac{ab}{2}$$

$$\Delta_{\text{big}} = \frac{(2a)(2b)}{2} = \frac{4ab}{2}$$

Draw a box 3 times the size
using the centre of enlargement

Scale factor $k = 3$

Area scale factor = $k^2 = 9$



$$\Delta_{\text{small}} = bh$$

$$\Delta_{\text{big}} = (3b)(3h) = 9bh$$

