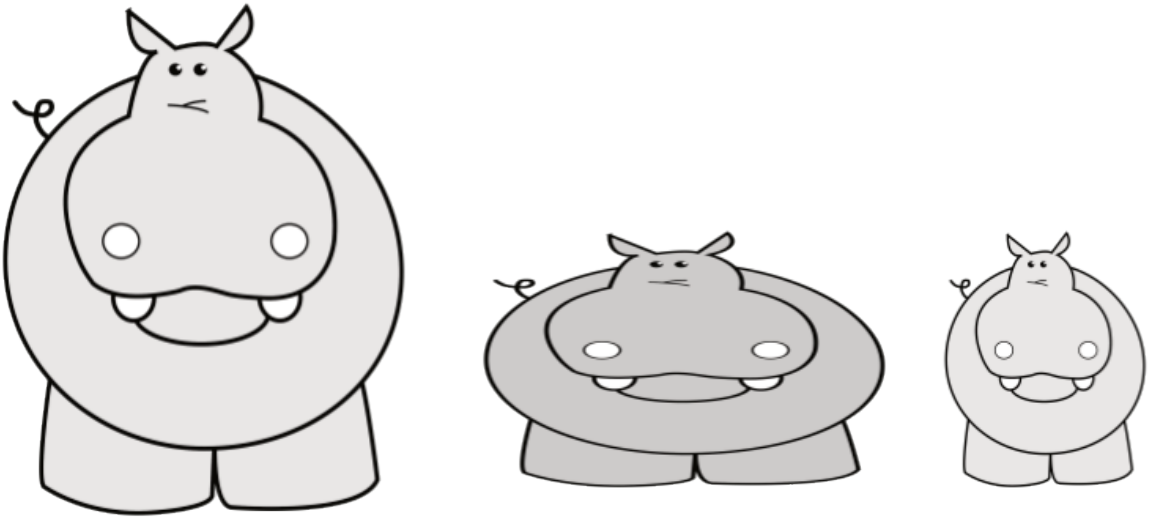
Unit 3 Lesson 1: Scale Drawings

1 Is That the Same Hippo? (Warm up)

Student Task Statement

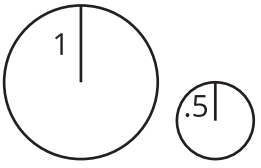


Diego took a picture of a hippo and then edited it. Which is the distorted image? How can you tell?

Is there anything about the pictures you could measure to test whether there's been a distortion?

Activity Synthesis

Scale factor is 2 or $\frac{1}{2}$

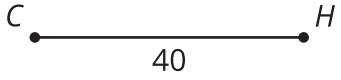


2 Sketching Stretching

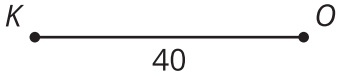
Student Task Statement

A **dilation** with center O and positive **scale factor** *r* takes a point P along the ray OP to another point whose distance is *r* times farther away from O than P is. If *r* is less than 1 then the new point is really closer to O, not farther away.

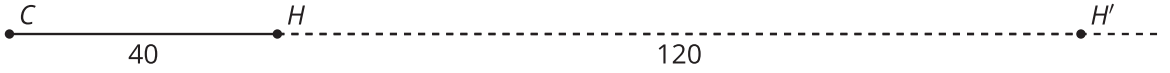
1. Dilate H using C as the center and a scale factor of 3. H is 40 mm from C.

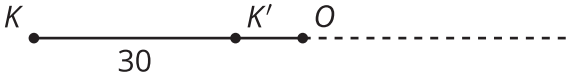


2. Dilate K using O as the center and a scale factor of $\frac{3}{4}$. K is 40 mm from O.



Activity Synthesis

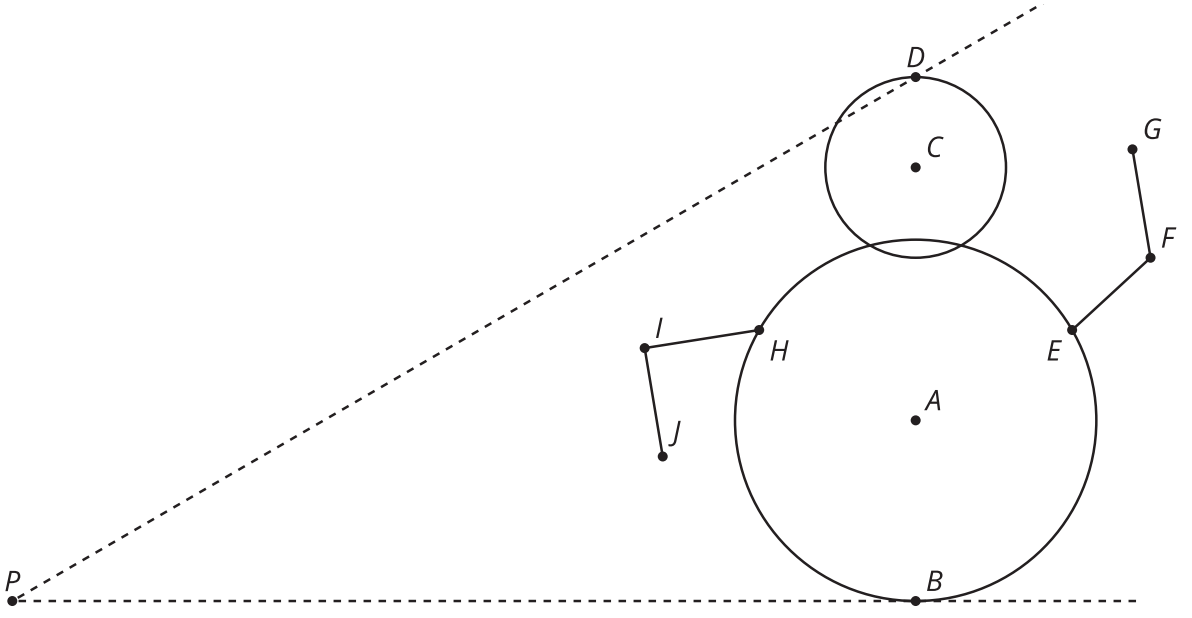




3 Mini Me

Student Task Statement

1. Dilate the figure using center P and scale factor $\frac{1}{2}$.



2. What do you notice? What do you wonder?

Images for Activity Synthesis

$PA' = k \cdot PA$