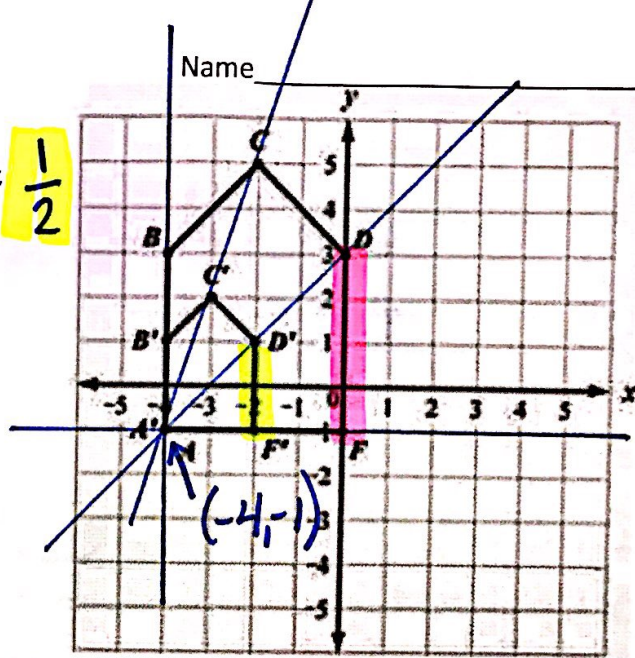


Unit 2B Test Review Part 1

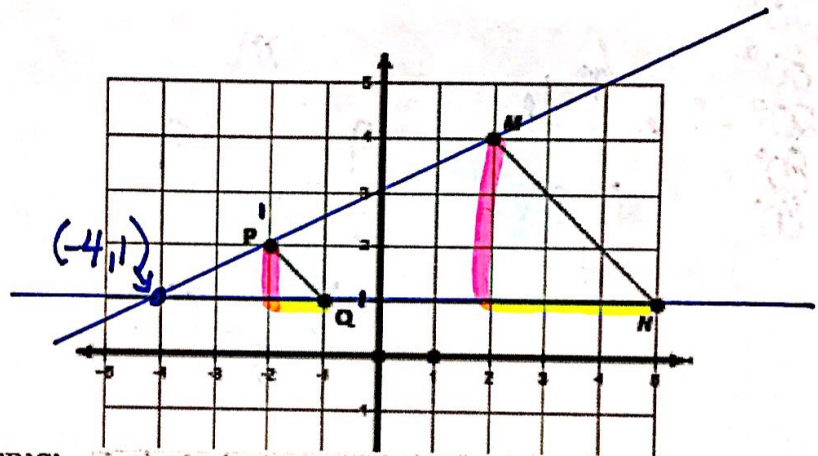
Figure A'B'C'D'F' is a dilation of figure ABCDF.

- Find the scale factor.  $\frac{\text{image}}{\text{pre-image}} = \frac{2}{4} = \frac{1}{2}$
- Find the center of dilation  $(-4, -1)$
- Complete the proportion.  $\frac{AB}{A'B'} = \frac{DF}{D'F'}$



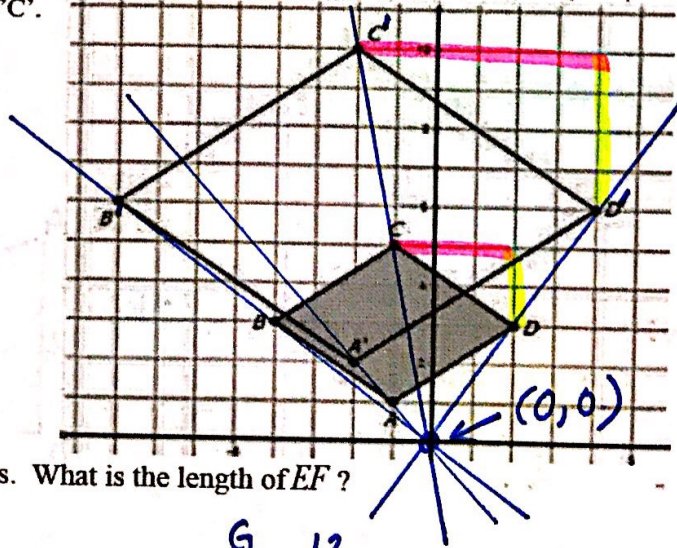
In a coordinate plane, segment PQ is the result of a dilation of segment MN.

- Find the scale factor.  $\frac{\text{image}}{\text{pre-image}} = \frac{1}{3}$
- Find the center of dilation  $(-4, 1)$

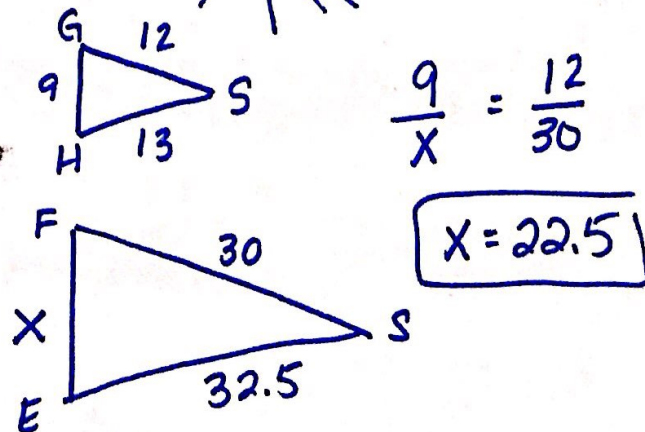
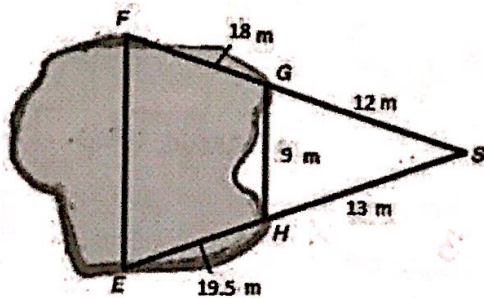


Triangle ABC has been dilated to its image A'B'C'.

- Find the scale factor.  $\frac{\text{image}}{\text{pre-image}} = \frac{6}{3} = 2$
- Find the center of dilation  $(0, 0)$

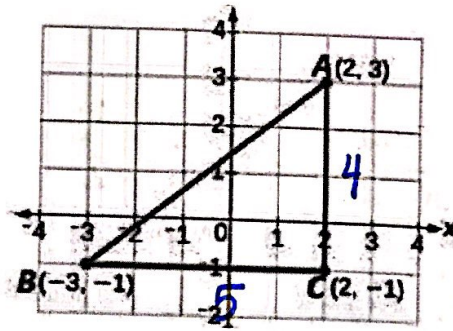


The figure below shows two similar triangles. What is the length of EF?



Right triangle ABC is shown to the right.

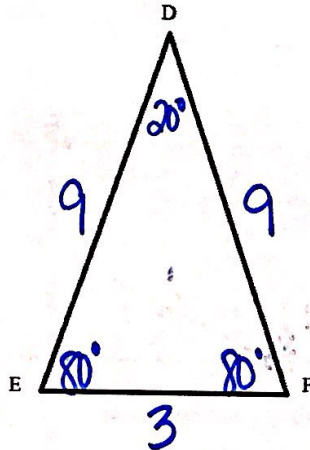
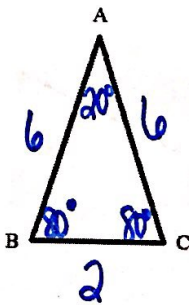
- $\triangle ABC \sim \triangle DEF$
- In  $\triangle ABC$  What is the ratio of side AC to side BC?  
4 : 5
- In  $\triangle DEF$  What is the ratio of side DF to side EF?  
4 : 5



Isosceles  $\triangle ABC$  is dilated with a scale factor of 1.5 to form  $\triangle DEF$ .

If  $m\angle B = 80^\circ$ ,  $\overline{AB} = 6$ , and  $\overline{BC} = 2$ ...find the missing sides and angles.

- $m\angle A = 20^\circ$
- $m\angle C = 80^\circ$
- $m\angle D = 20^\circ$
- $m\angle E = 80^\circ$
- $m\angle F = 80^\circ$

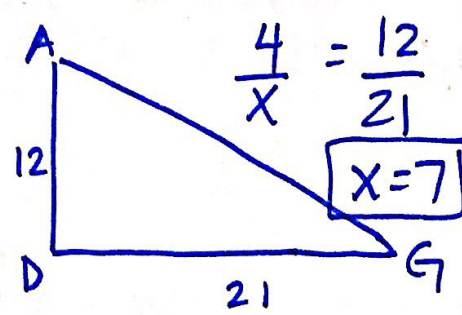
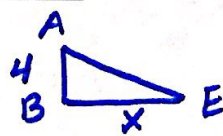
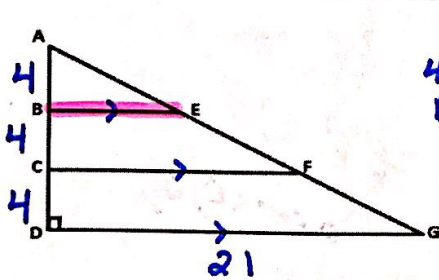


- $\overline{AC} = 6$
- $\overline{DE} = 9$
- $\overline{DF} = 9$
- $\overline{EF} = 3$

In right triangle ADG below,  $\overline{BE}$ ,  $\overline{CF}$ , and  $\overline{DG}$  are parallel.

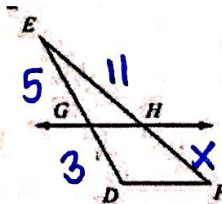
$\overline{BC} = 4$ ,  $\overline{DG} = 21$ , and  $\overline{AB} = \overline{BC} = \overline{CD}$ .

What is the length of  $\overline{BE}$ ? 7



In the triangle shown,  $\overline{GH} \parallel \overline{DF}$ .

$\overline{EG} = 5$ ,  $\overline{GD} = 3$ ,  $\overline{EH} = 11$ . What is the length of  $\overline{HF}$ ?



Triangle Prop. Theorem

$$\frac{5}{3} = \frac{11}{x}$$

$$\boxed{x = 6.6}$$