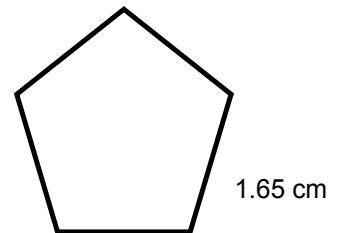
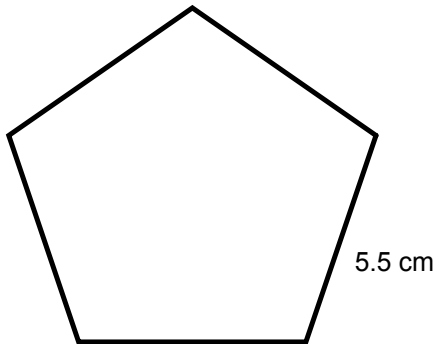


Chapter 7 Review



Find the scale factor for the following:



$$\frac{5.5}{1.65} = 3.3 \quad \text{original}$$

$$\frac{\text{enlargement} / \text{reduction}}{\text{original}}$$

$$\frac{1.65}{5.5} = 0.3$$

Given the following diagram what would be the dimensions for the scaled diagram if a scale factor of

A. 1.5 is used

B. 0.6 is used

$\frac{6}{10}$

52.5 cm

63 cm

35 cm $\times 1.5$

42 cm $\times 1.5$

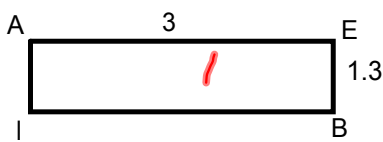
21 cm

25.2 cm

good luck

fingers crossed

Are these polygons similar

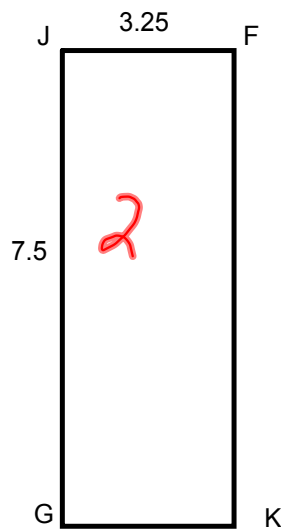


$$\frac{AE}{FK} = \frac{EB}{KG}$$

$$\frac{3}{7.5} = \frac{1.3}{3.25}$$

$$0.4 = 0.4$$

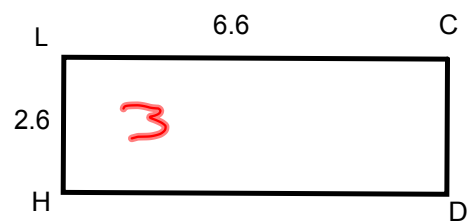
$AEBI \sim FKGI$



$$\frac{JF}{CL} = \frac{JG}{CD}$$

$$\frac{3.25}{2.6} = \frac{7.5}{6.6}$$

$$1.25 \neq 1.136$$



$$\frac{AE}{LC} = \frac{EB}{CD}$$

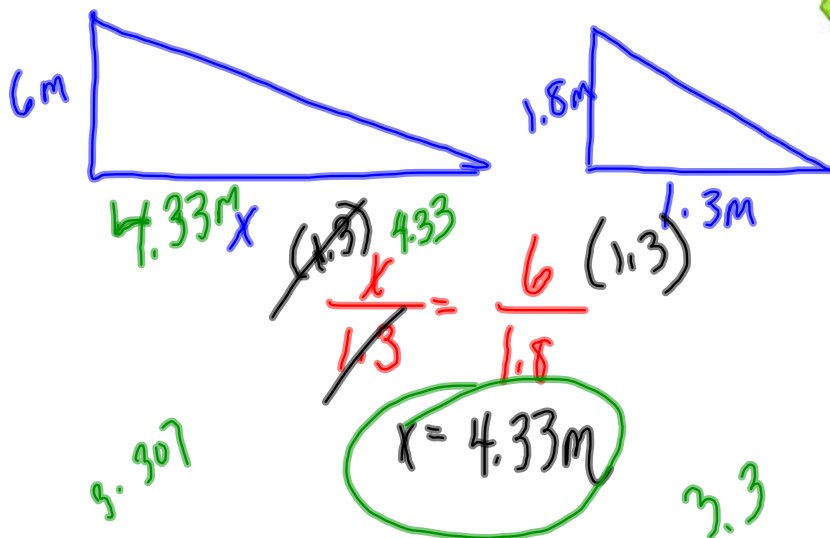
$$\frac{3}{6.6} = \frac{1.3}{2.6}$$

$$0.45 \neq 0.5$$

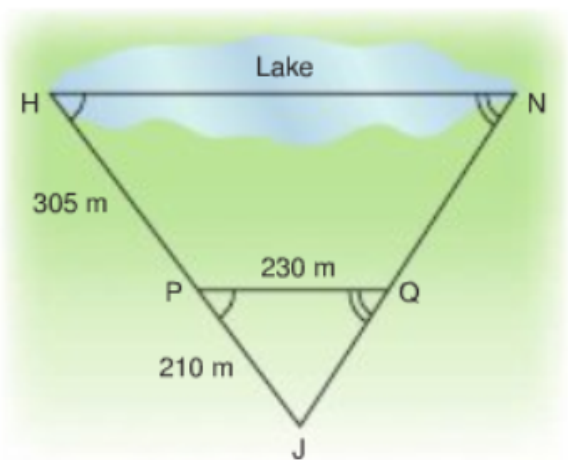
Solve for the unknown:

A tree is 6 m high. A person who is 1.8 m has a shadow that is 1.3 m long.

- A. Sketch a diagram.
- B. Find the length of the tree's shadow



Find the distance across the lake.



Hand-drawn diagrams and calculations:

Diagram 1: Triangle HJN with side $HJ = 515\text{ m}$ and base $HN = x$.

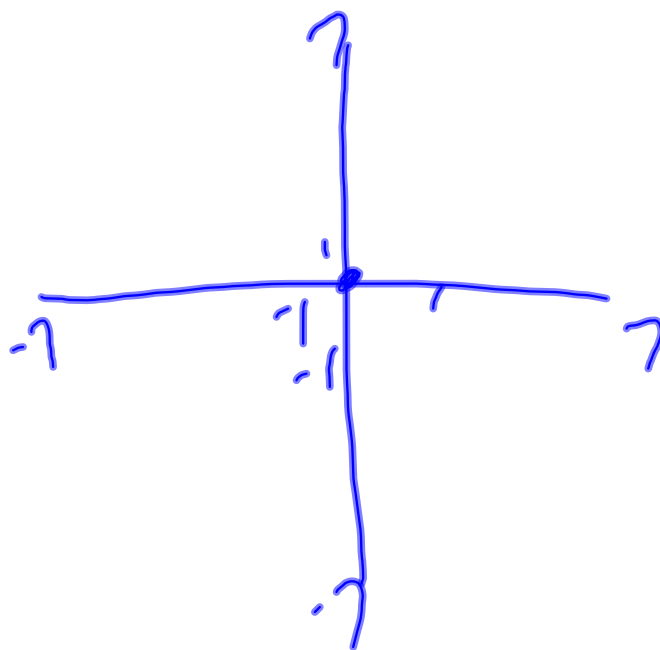
Diagram 2: Triangle PJQ with side $PJ = 210$ and base $PQ = 230$.

Proportion:

$$\frac{x}{\cancel{230}} = \frac{515}{210} \quad (\cancel{230})$$

$$x = 564.05\text{ m}$$

Result: 564.05

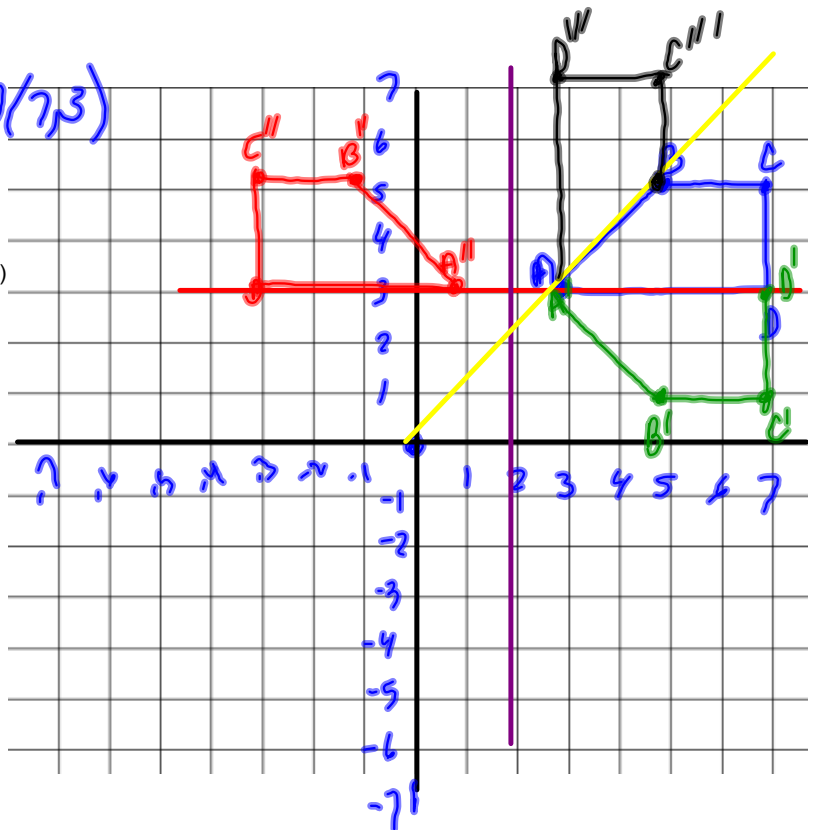


Plot the following

A (3, 3) B (5, 5) C (7, 5) D (7, 3)

$A(3,3)$ $B(5,5)$ $C(7,5)$ $D(7,3)$

- A. Draw a reflection through 3 on the y-axis
- B. Draw a reflection through 2 on x-axis
- C. Draw a reflection through the origin and (5,5)
- D. Identify any lines of symmetry for each a-c

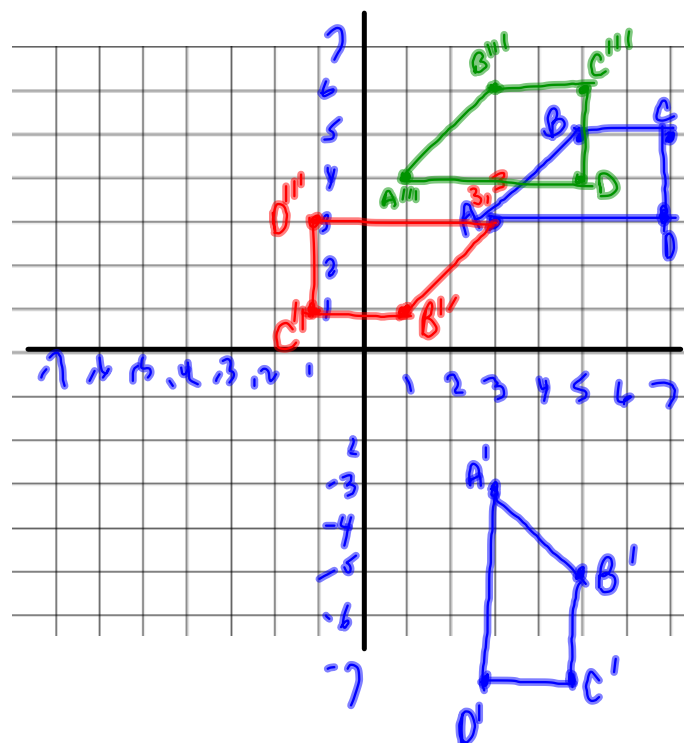


Plot the following

A (3, 3) B (5, 5) C (7, 5) D (7, 3)

- A. Is there rotational symmetry?
angle?
order?
- B. Rotate 90 degrees clockwise using the origin
- C. Rotate 180 degrees counter clockwise at point A

D. Translation
U1 L2

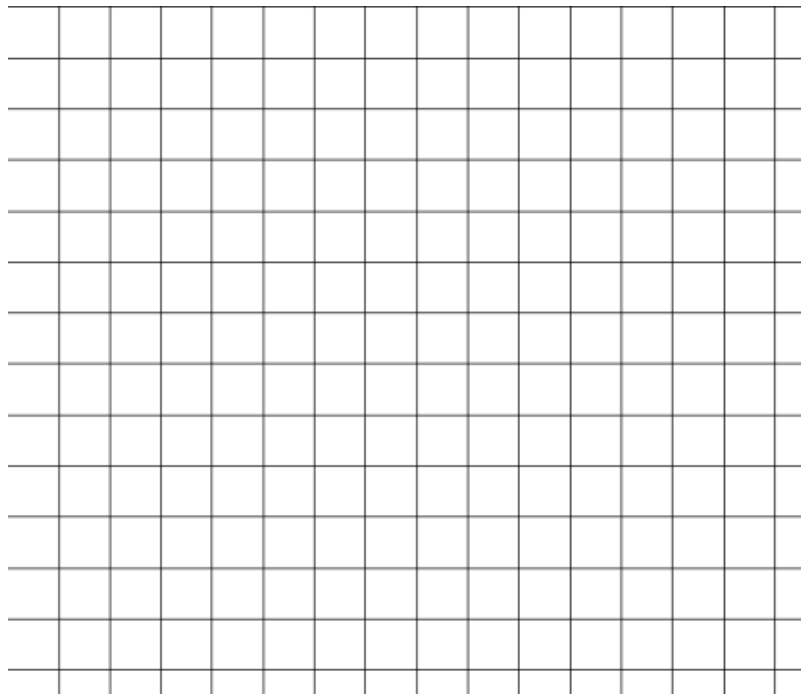


Plot the following

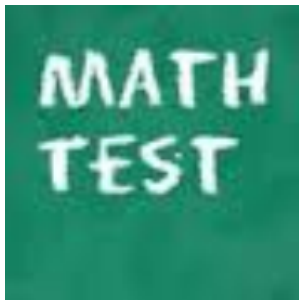
A (3, 3) B (5, 5) C (7,5) D (7,3)

A translation of R3 D2

Is there a line of symmetry



4.2



↳

Chapter 7

2.1



Review

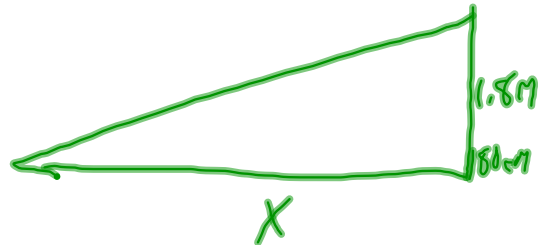
Pg 377
2-7
9-15
17-19



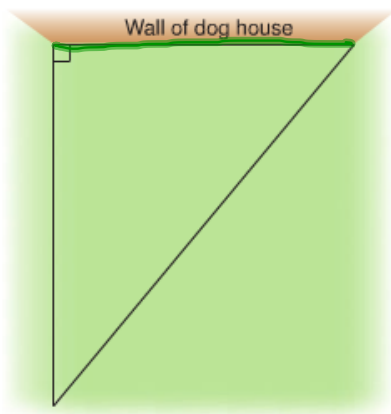
Extra
Pg 380
1, 2, 4

3. A full-size pool table has dimensions approximately 270 cm by 138 cm. A model of a pool table has dimensions 180 cm by 92 cm.
- What is the scale factor for this reduction?
 - A standard-size pool cue is about 144 cm long. What is the length of a model of this pool cue with the scale factor from part a?

4. Here is a scale diagram of a ramp. The height of the ramp is 1.8 m. Measure the lengths on the scale diagram. What is the length of the ramp?



5. Gina plans to build a triangular dog run against one side of a dog house. Here is a scale diagram of the run. The wall of the dog house is 2 m long. Calculate the lengths of the other two sides of the dog run.



6. Which pentagon is similar to the red pentagon? Justify your answer.

