

Warm Up: Geometry

1/13

1) $\frac{12}{18}$ is proportional to...?

2) A triangle has sides with lengths 6, 8 and 11.
A second triangle has side lengths 18, 16, 22.
Are these two triangles similar? Why/why not?

Feb 27-7:39 AM

W.A.L.T.:

Determine if two figures are similar and use scale factor to solve problems.

W.A.S.I.:

We can solve similar figure problems using scale factor.

Jan 13-1:40 PM

Solutions to P.W.: Geometry pg. 264 # 3-5

3.) The triangles are not similar. There is not enough information

4.) a.) Yes; Angles congruent; $ED = 21$, $DF = 21$

b.) Yes; Angles congruent; $RQ \approx 42.7$

5.) No; she is not correct. She did not correctly write the ratio of corresponding side lengths.

$$9/10 = EC/8.75; EC \approx 7.9$$

Dec 31-10:07 PM

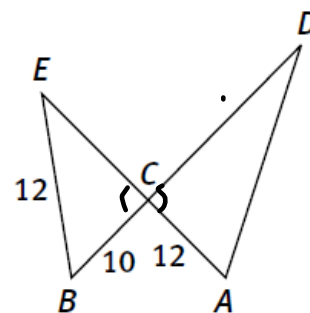
Solutions to P.W.: Geometry pg. 264 TTA, #3 - 5

3. Jorge found DA by writing and solving the proportion shown, but he is incorrect. What mistake did Jorge make?

$$\frac{10}{12} = \frac{12}{DA}$$

$$10 \cdot DA = 12 \cdot 12$$

$$DA = 14.4$$

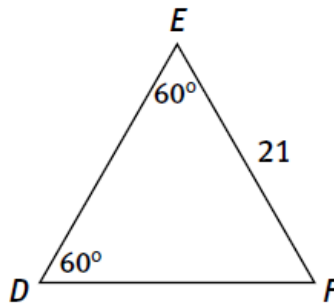
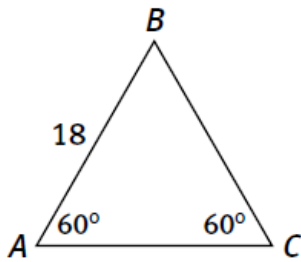


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Solutions to P.W.: Geometry pg. 264 TTA, #3 - 5

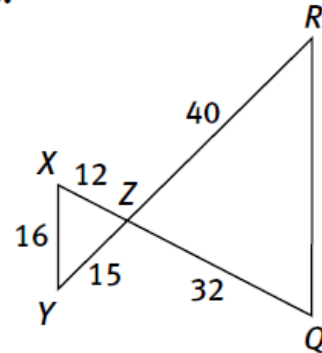
4. Determine whether each pair of triangles is similar. If so, write the similarity criterion that can be used to show they are similar and find the unknown measure.

a.



$ED =$ _____
 $DF =$ _____

b.



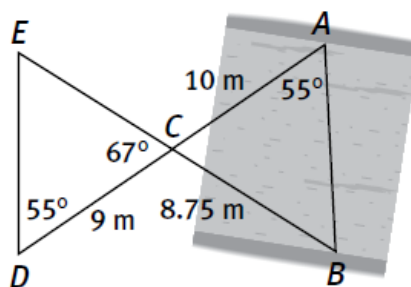
$RQ =$ _____

Dec 31-10:07 PM

Solutions to P.W.: Geometry pg. 264 TTA, #3 - 5

5. Critique the reasoning of others. $\triangle ABC \sim \triangle DEC$. Clarissa wants to measure another ravine and wrote the following proportion to find EC . Is she correct? If not, explain why and correct her work. Then find EC .

$$\frac{9}{10} = \frac{8.75}{EC}$$



Dec 31-10:07 PM

Solutions to P.W.: Geometry pg. 271 #1-5

1.) a.) Sides in proportion b.) SAS Similarity Theorem c.) Angles congruent d.) SAS Similarity Theorem e.) Sides in proportion

2.) $x = 2.042 \text{ ft}$

3.) $x = 25 \text{ m}, y = 15 \text{ m}, z = 58^\circ$

4.) $x/42 = 12/36; x = 14 \text{ cm}$

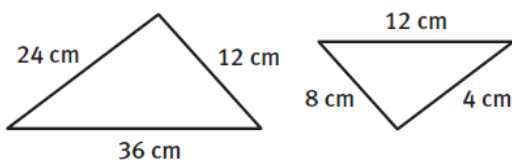
5.) Corresponding sides are in proportion, and corresponding angles are congruent.

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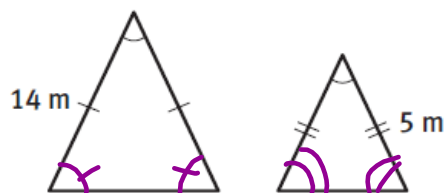
Solutions to P.W.: Geometry pg. 271 #1 - 5

1. For each pair of triangles, write which similarity criterion, if any, can be used to show the triangles are similar.

a.



b.

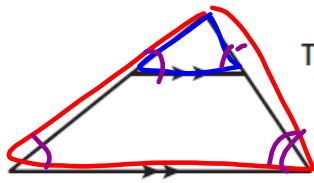


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Solutions to P.W.: Geometry pg. 271 #1 - 5

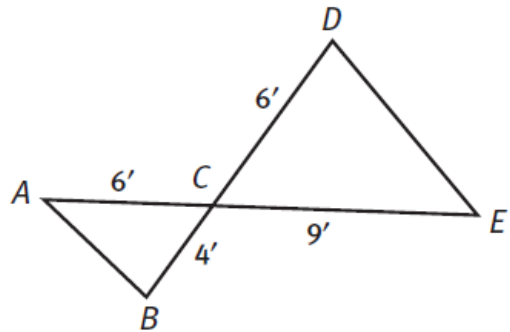
1. For each pair of triangles, write which similarity criterion, if any, can be used to show the triangles are similar.

c.



The arrows indicate parallel lines.

d.

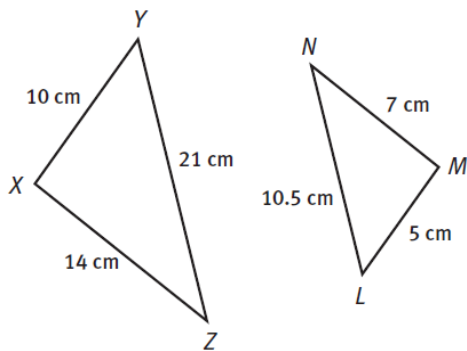


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Solutions to P.W.: Geometry pg. 271 #1 - 5

1. For each pair of triangles, write which similarity criterion, if any, can be used to show the triangles are similar.

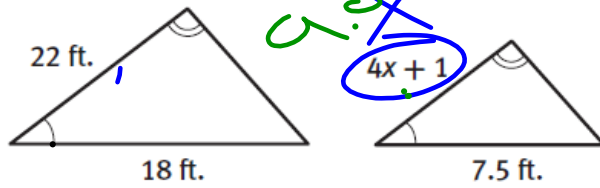
e.



Dec 31-10:07 PM

Solutions to P.W.: Geometry pg. 271 #1 - 5

2. Solve for x in the following figure.



$$\frac{7.5}{18} = 0.41$$

$$22(0.41) = 9.02$$

$$4x + 1 = 9.02$$

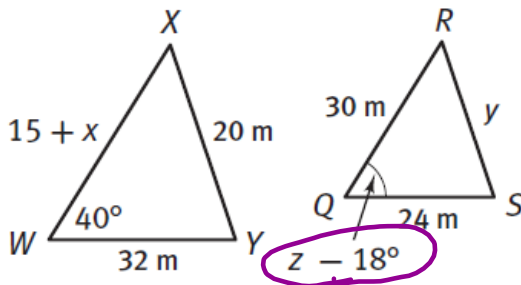
$$4x = 8.02$$

$$x = 2.005$$

Dec 31-10:07 PM

Solutions to P.W.: Geometry pg. 271 #1 - 5

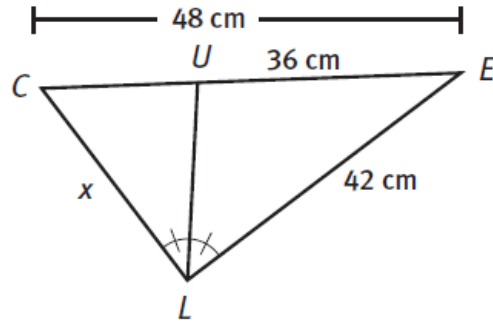
3. The following triangles are similar. Determine the values of x , y , and z .



Dec 31-10:07 PM

Solutions to P.W.: Geometry pg. 271 #1 - 5

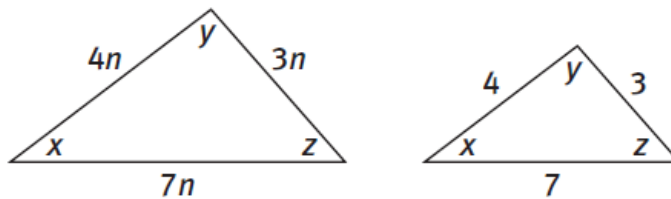
4. $\triangle CLU \sim \triangle ELU$. Given $\triangle CEL$ with measures as shown, determine x . Show your work.



Dec 31-10:07 PM

Solutions to P.W.: Geometry pg. 271 #1 - 5

5. Explain why the following triangles are similar to each other.



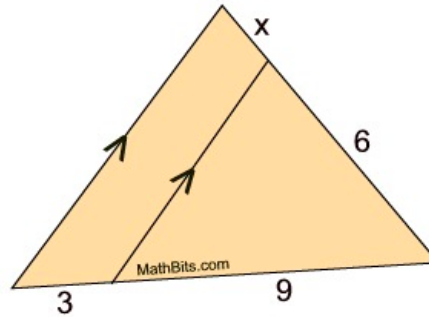
Dec 31-10:07 PM

Exit Ticket:

- Get out a loose leaf piece of paper and answer these questions
INDIVIDUALLY

- Just do your absolute best because this is for me to see what **YOU**
know

- 1.) Given the figure below, find x .
- 2.) Why are these figures similar AND what does it mean to be similar?



Jan 13-1:38 PM

Today's Activities:

- Notes, In Class example

P.W. for tonight:

- pg.272 #6,7,12-15

Dec 31-9:59 PM