**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**M8-U2: HW #5 – Similarity (proportionality) Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**#1.** A surveyor drew the diagram at the right to find the distance from *J* to *I* across the canyon. . What is the distance ?



**#2.** Find the missing measures for .



**#3.** Each pair of figures is similar. Find the length of *x*.



**#4.** is similar to . The length *AB* is 10. The length *BC* is 7.

Find the length *XY* if the length *YZ* is 14.

**#5.** Tell whether the pair of polygons is similar. Explain why or why not.



**#6.** The following figures are similar polygons. Find the unknown lengths.

**Spiral:**

**#7.** Solve the following proportion: .

**#8.** Simplify the following: 

**#9.** Kaitlin earns $6.50 for each hour she works. On Friday she worked for 3 hours. She also worked on Saturday. If she earned a total of $52.00 for the two days of work, how many hours did she work on Saturday?