Comparing Line Segments

A. Choose the correct answer:

- 1. If segment AB is 5 cm and segment CD is 7 cm, which is longer?
 - a) AB b) CD
 - c) Both are equal d) Cannot say

2. Which method is most accurate to compare two line segments?

- a) Folding paper b) By ruler
- c) By guessing d) By drawing circles

3. Segment EF is 4.5 cm long and segment GH is 4.5 cm long. What can we say?

- a) EF is longer b) GH is longer
- c) Both are equal d) None is measurable

4. Line segment of 8 cm is compared with one of 6 cm. Which is shorter?

- a) 8 cm b) 6 cm
- c) Both equal d) Depends on shape

5. Which of these pairs cannot be equal in length?

- a) 5 cm and 5.0 cm b) 3 cm and 2.9 cm
- c) 7 cm and 7 cm d) 4.5 cm and 4.5 cm

B. Write the Missing Terms to Complete the Sentences:

- 1. A _____ is used to measure and compare line segments
- 2. A line segment with 9.5 cm is ____ than one with 6.5 cm
- 3. Two line segments of the same length are called _____ segments
- 4. The line segment with ____ length is shorter
- 5. A ruler helps us compare line segments _____

C. Mark each sentence with a True (\checkmark) or False (X):

- 1. Two segments of 5 cm and 5.0 cm are equal
- 2. Longer segments have greater numerical length
- 3. We can compare segments using only our eyes

- 4. 4.9 cm is shorter than 5 cm
- 5. A segment of 10 cm is the longest among 7 cm, 8 cm and 10 cm

D. Figure out the answers to these questions:

- 1. Draw two line segments, one 6 cm and another 4 cm. Compare them
- 2. Measure and compare the lengths of line segments AB and CD if AB = 7.5 cm and CD = 6.5 cm
- 3. Write which is longer: segment EF = 5.3 cm or segment GH = 5.7 cm
- 4. Draw three line segments and arrange them in increasing order of length
- 5. Compare segment MN = 8 cm and PQ = 8 cm. What do you notice?

E. Challenge yourself with these questions:

- 1. Draw three line segments of different lengths and label them
- 2. Measure and compare the lengths of segment $XY = 3 \frac{1}{2} \text{ cm}$ and AB = 4 cm
- 3. Draw two equal line segments using a ruler
- 4. If CD is 6.4 cm and EF is 6.8 cm, which one is longer and by how much?
- 5. Draw a figure with at least four line segments and identify the longest and shortest segments