4 BAR LINKAGE

WORK SHEET

Name:____________________________________ Date:_____________

Directions:
Use the “4 Bar Linkage Assembly” as shown below to answer the following problems. Adjust the lengths of the bars as described in each problem then, rotate the crank.
Under results, describe in detail what you see happening to the mechanism, when you rotated the crank.

Situation

1. Bar B-C = Bar A-D
   Bar A-B = Bar C-D

Results

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Situation

2. Bar B-C = Bar A-D  
   Bar A-B is shorter than Bar C-D

3. Bar B-C = Bar A-D  
   Bar A-B is longer than Bar C-D

4. Bar B-C is shorter than Bar A-D  
   Bar A-B = Bar C-D

5. Bar B-C is shorter than Bar A-D  
   Bar A-B is shorter than Bar C-D
**Situation**

6. Bar B-C is shorter than Bar A-D
   Bar A-B is longer than Bar C-D

7. Bar B-C is longer than Bar A-D
   Bar A-B = Bar C-D

8. Bar B-C is longer than Bar A-D
   Bar A-B is shorter than Bar C-D

9. Bar B-C is longer than Bar A-D
   Bar A-B is longer than Bar C-D
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Adaptive equipment is available upon request for individuals with disabilities.

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This project is sponsored by a $15.9 million grant from the U.S. Department of Labor, Employment and Training Administration.

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