Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Angle Addition Postulate Worksheet

1. List the three undefined terms and explain why we need them.
2. If two angles up to 180° they are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ angles.
3. If two angles add up to 90° they are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ angles.
4. Name at least two pairs of supplementary angles in the figure below.

(There are 4 total)



1. Use the following diagram to complete the angle addition postulate.



$$m∠ \\_\\_\\_\\_\\_\\_\\_\\_\\_+m∠\\_\\_\\_\\_\\_\\_\\_\\_\\_=m∠\\_\\_\\_\\_\\_\\_\\_\\_\\_$$

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1. Use the following diagram to complete the angle addition postulate.

Then use the given information to solve for the missing angle measure.

$m∠AJK=61°$ and $ m∠IJK=153°$

 $m∠ \\_\\_\\_\\_\\_\\_\\_\\_\\_+m∠\\_\\_\\_\\_\\_\\_\\_\\_\\_=m∠\\_\\_\\_\\_\\_\\_\\_\\_$

1. Are the following angles supplementary or complementary?

Set up an equation and solve for *x*.



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