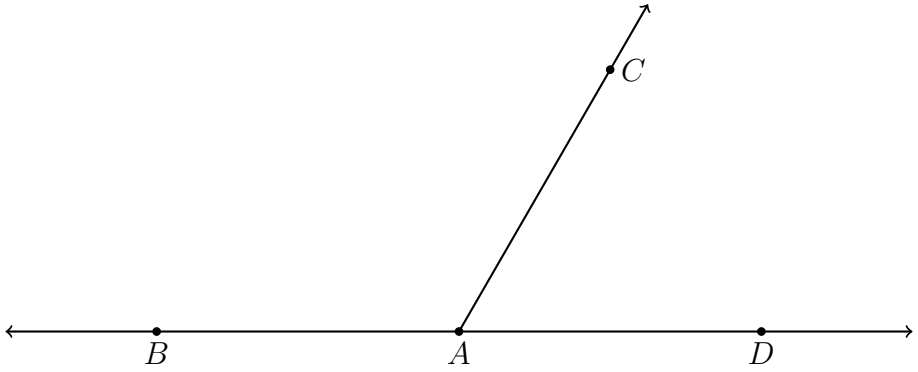
2.3 Classwork: Special angle pairs

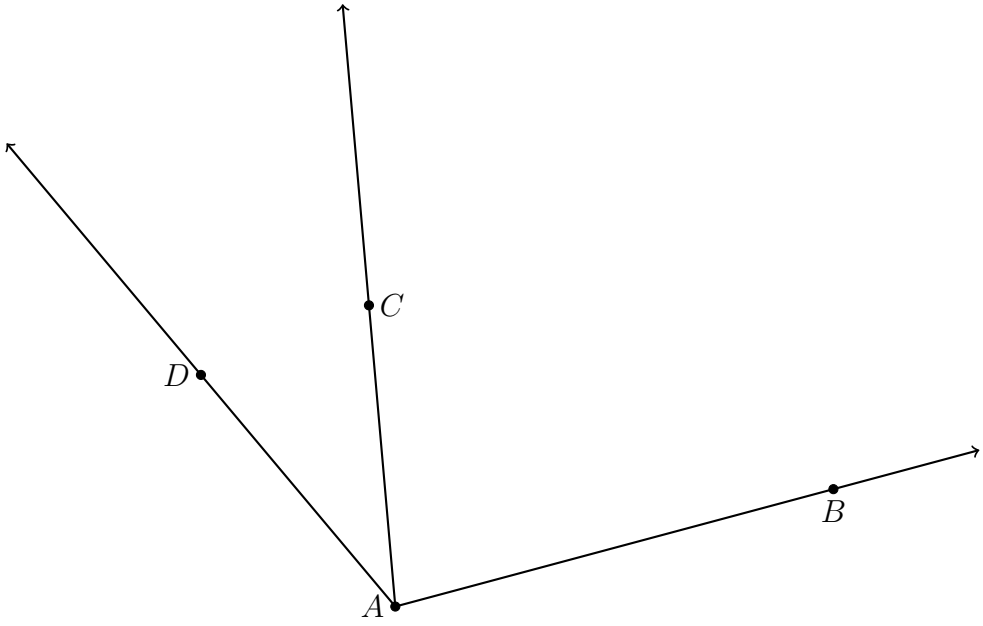
1. Given a straight line and a ray, making two angles.
   (a) Write down the names of the two angles using proper notation.

   (b) Using a protractor, measure the two angle in degrees.

   (c) Do they sum to 180°?



2. Write down the name of the *three* angles shown in the diagram below and their angle measures, using your protractor.



3. As shown below, two lines intersect making four angles: $\angle 1$, $\angle 2$, $\angle 3$, and $\angle 4$.

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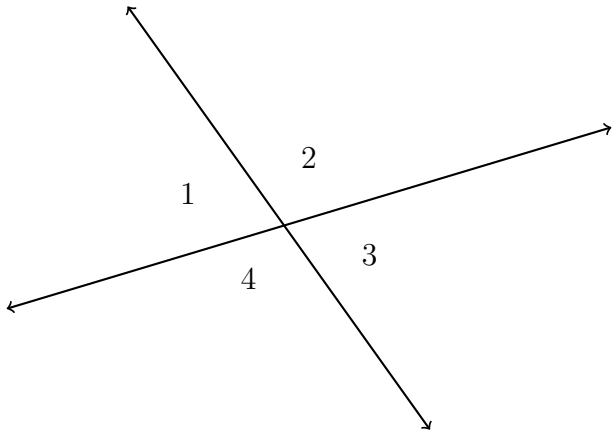
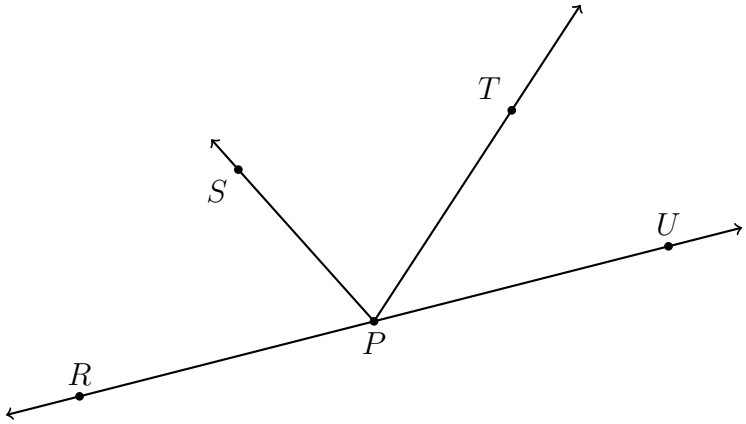


(a) Which angle is opposite $\angle 1$? _____

(b) Name an angle that is adjacent to $\angle 4$. _____

(c) True or false, $\angle 2$ and $\angle 4$ are vertical angles. _____

4. Given the situation in the diagram, answer each question. Circle True or False.



(a) True or False: $\overrightarrow{RP}$ and $\overrightarrow{UP}$ are opposite rays.

(b) True or False: $\angle TPR$ is an obtuse angle.

(c) True or False: $\angle RPS$ and $\angle SPU$ are supplementary angles.

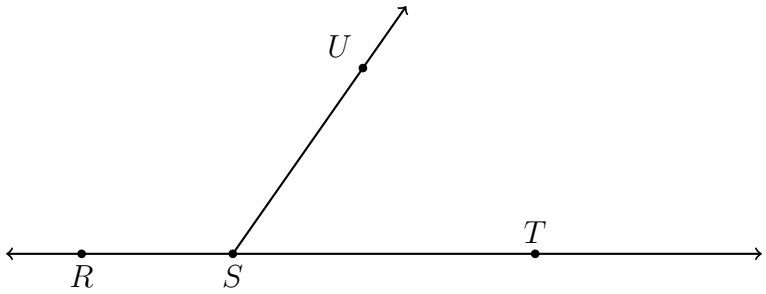
(d) True or False: $\angle RPS$ and $\angle SPT$ are adjacent angles.

5. Find the measure of the angle in degrees and the given segment's length in centimeters.

   (a) $m\angle UST =$ _____

   (b) $SU =$ _____

   (c) Name a pair of opposite rays: _____



6. Measure the required angles of the diagram below and answer the questions.

   (a) $m\angle AOB =$ _____ $m\angle BOC =$ _____ $m\angle DOE =$ _____

   (b) Name an angle that is vertical to $\angle DOE$: _____

   (c) Name an angle that is complementary to $\angle AOB$: _____