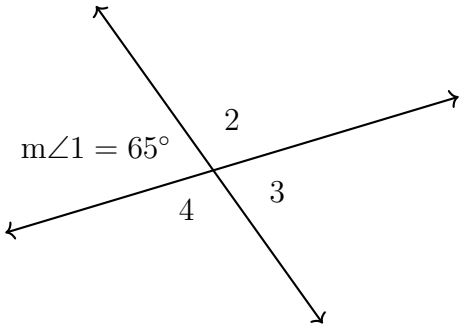
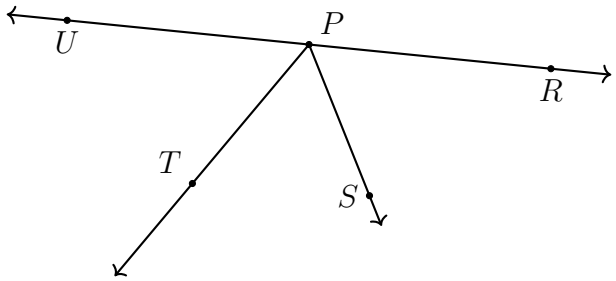
2.3 Homework: Vertical angles

1. Two lines intersect with $\text{m}\angle 1 = 65°$. Find the measures of $\angle 2$, $\angle 3$, and $\angle 4$, marking them on the diagram.



2. 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 supplementary to $\angle TPU$.

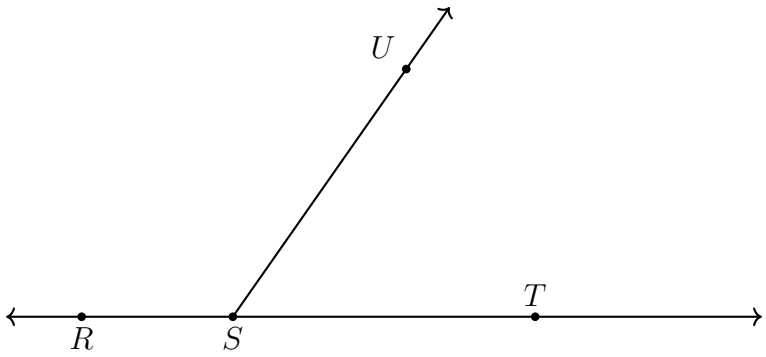
   (c) True or False: $\angle RPS$ and $\angle TPS$ are complementary angles.

   (d) True or False: $\angle RPS$ and $\angle TPU$ are vertical angles.

3. 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: _____

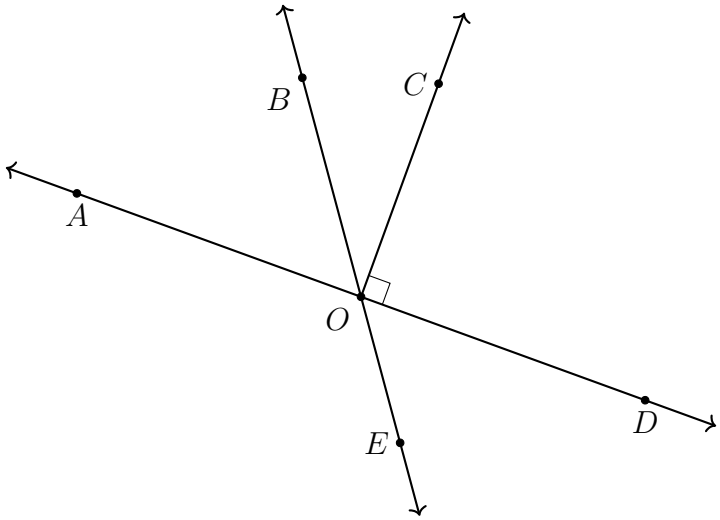


4. Given the diagram below.

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

   (b) Name the ray that is opposite to $\overrightarrow{OB}$: _____

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

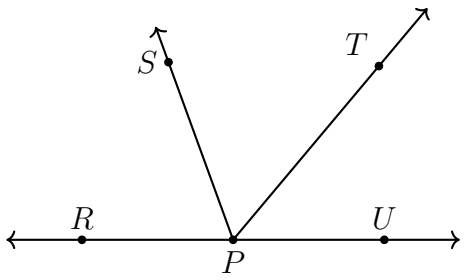


5. Given the situation in the diagram, answer each question. Circle True or False.

   (a) T or F: $\overrightarrow{PU}$ and $\overrightarrow{PT}$ are opposite rays.

   (b) T or F: $\angle RPT$ and $\angle SPU$ are adjacent angles.

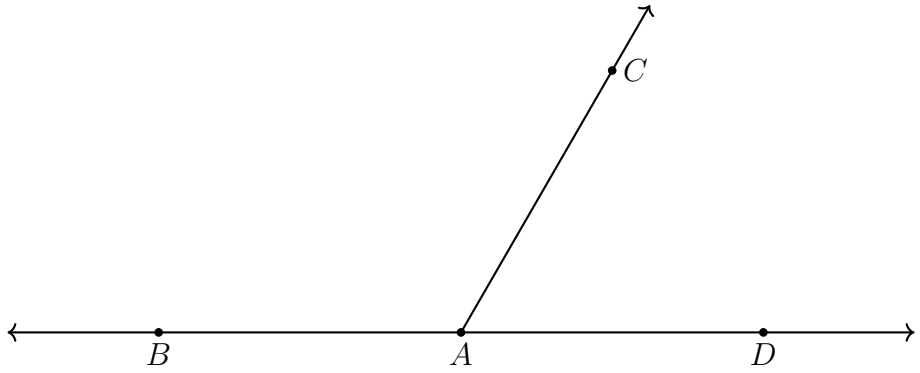
   (c) T or F: $\angle TPU$ is an acute angle.



6. 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°?



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