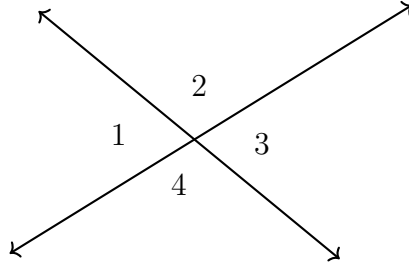
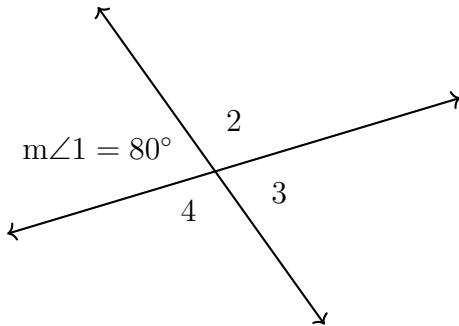


2.5 Classwork: Vertical angles

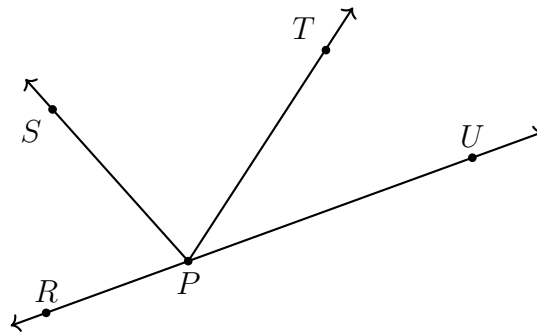
1. As shown below, two lines intersect making four angles: $\angle 1$, $\angle 2$, $\angle 3$, and $\angle 4$.



- (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. _____
2. Two lines intersect with $m\angle 1 = 80^\circ$. Find and mark the measures of $\angle 2$, $\angle 3$, and $\angle 4$.



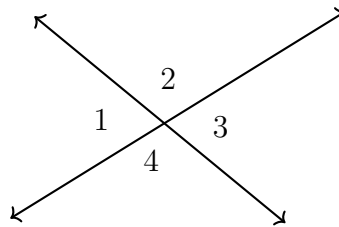
3. Given the situation in the diagram, answer each question. Circle True or False.



- (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.

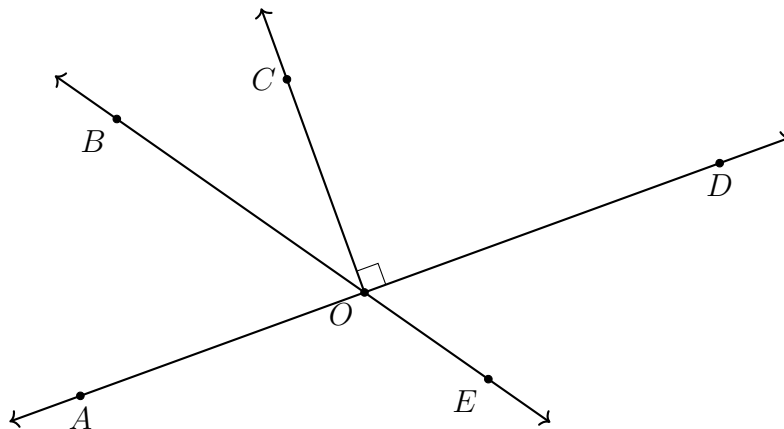
4. Identify the true statements

- (a) $\angle 1 \cong \angle 2$
- (b) $\angle 2 \cong \angle 4$
- (c) $m\angle 1 + m\angle 4 = 180^\circ$
- (d) $m\angle 2 + m\angle 3 = 90^\circ$



5. Given $m\angle AOB = 55^\circ$. Mark the angles of the diagram below. Answer the questions.

- (a) $m\angle AOB = \underline{\hspace{2cm}}$ $m\angle BOC = \underline{\hspace{2cm}}$ $m\angle DOE = \underline{\hspace{2cm}}$
- (b) Name an angle that is vertical to $\angle DOE$: $\underline{\hspace{2cm}}$
- (c) Name an angle that is complementary to $\angle AOB$: $\underline{\hspace{2cm}}$



6. Angles APC and CPD form a linear pair. $m\angle APC = 10x + 15$ and $m\angle CPD = 3x - 4$. Find $m\angle CPD$. Check your answer for full credit.

