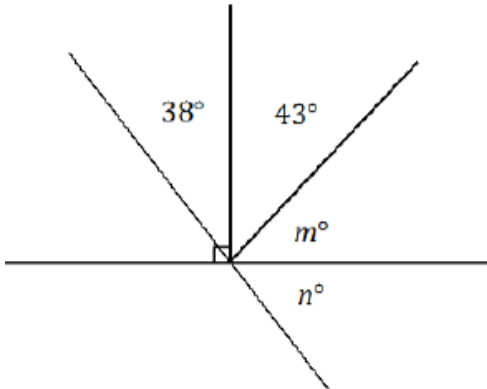


Pre-Algebra

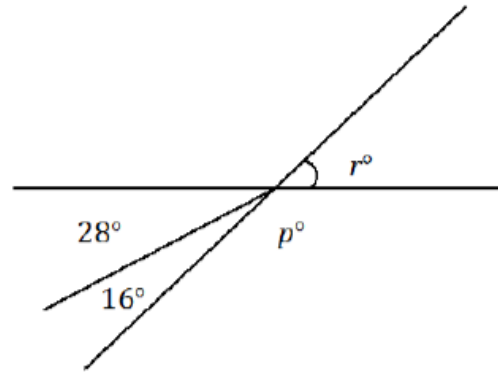
Aim: How can we use angle relationships to solve word problems?

Do Now:

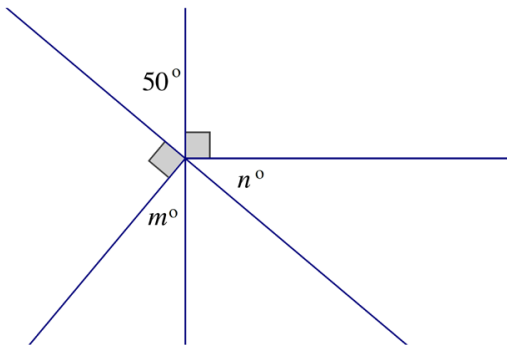
1. Find the value of m and n .



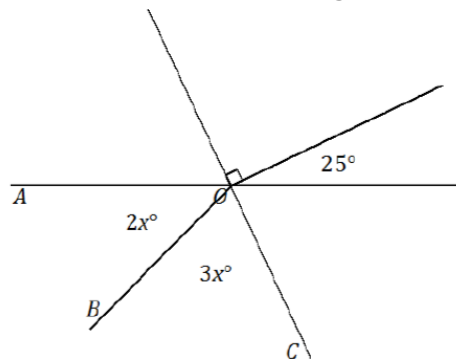
2. Find the value of p and r .



3. Find the value m and n .



4. Find the measure of angles AOB and BOC .



Solve each word problem using your knowledge of angle pair relationships.

1. Two angles are supplementary. The $m \angle A = 77^\circ$ and the $m \angle B = 3x - 2$. Find the value of x .

2. Two angles are supplementary. One angle is 30 degrees more than twice the measure of the other. Find the measure of both angles.

3. The measure of the complement of an angle is 4 times the measure of the angle.
Find the measure of the angle.
4. The expressions $5w - 20$ and $2w + 16$ represent the measures in degrees of a pair of vertical angles.
- Find the value of w .
 - Find the measure of each angle.
5. Line AB and Line CD intersect at point E . $m\angle AED = 4x + 30$ and $m\angle DEB = 6x - 20$.
Find the measure of $\angle DEB$.
6. Two angles are complementary and congruent. What is the measure of each angle?
7. The measurement of the complement of an angle exceeds the measure of the angle by 25%.
Find the angle and its complement.
8. The ratio of the measurement of an angle to its supplement is 3:5. Find the angle and its supplement.