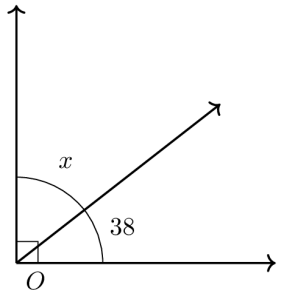
Geometry Angle Relationships Practice

Name: _____ Date: _____

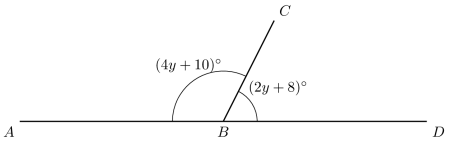
1. Find the measure of the complement of a $38°$ angle.



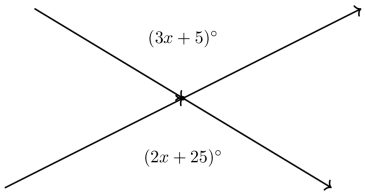
2. Find the measure of the supplement of a $127°$ angle.

3. Two complementary angles have measures $x°$ and $(2x + 6)°$. What is the measure of the larger angle?

4. Angles $\angle ABC$ and $\angle CBD$ form a linear pair (they are adjacent and their non-shared sides form a straight line). If $m\angle ABC = (4y + 10)°$ and $m\angle CBD = (2y + 8)°$, find the measure of the obtuse angle.



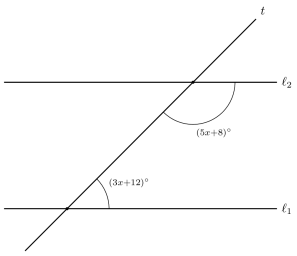
5. Two vertical angles are formed by intersecting lines. If one vertical angle measures $(3x + 5)^\circ$ and the opposite vertical angle measures $(2x + 25)^\circ$, find the measure of each vertical angle.



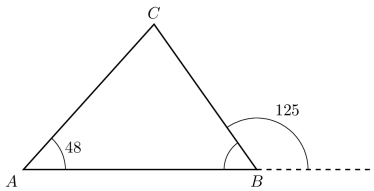
6. Lines ℓ_1 and ℓ_2 are parallel, cut by a transversal t. If a corresponding angle on ℓ_1 is 68°, what is the measure of the corresponding angle on ℓ_2?

7. Lines $\ell_1 \parallel \ell_2$ are cut by transversal t. Two alternate interior angles have measures $(3x + 11)^\circ$ and $(5x - 9)^\circ$. Find the measure of each of these angles.

8. Lines $\ell_1 \parallel \ell_2$ are cut by transversal t. Two same-side (consecutive) interior angles have measures $(3x + 12)^\circ$ and $(5x + 8)^\circ$. Find the measure of the larger angle.



9. A triangle has an exterior angle measuring 125°. One of the remote interior angles measures 48°. What is the measure of the other remote interior angle?



10. Two parallel streets run east-west. A crosswalk cuts across them as a transversal. If the angle the crosswalk makes with the first street on the north side is 62°, what is the measure of the corresponding angle it makes with the second street on the north side? (Assume the streets are perfectly parallel.)