

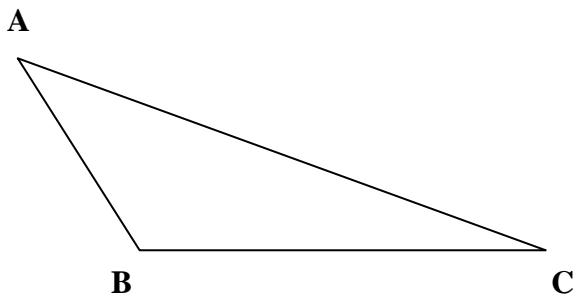
Angle Relationships

Angle Relationships and their definitions:

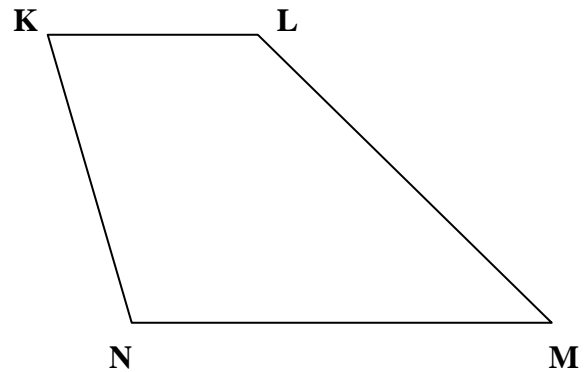
- **Adjacent** angles are two angles that share a common vertex and ray.
- **Complementary** angles are two angles whose measures sum to 90 degrees.
- **Supplementary** angles are two angles whose measures sum to 180 degrees.
- **Vertical** angles are two angles opposite one another, formed by two intersecting lines.

There are also special angle relationships in polygons. Use your protractor to measure each angle of the figures below.

[1] Triangle ABC

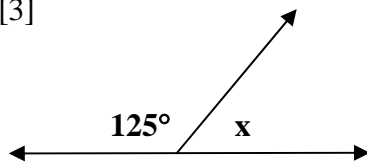


[2] Trapezoid KLMN



Write an algebraic equation to determine what the variable x will equal in each diagram below. Then solve it, showing all work to justify your answer.

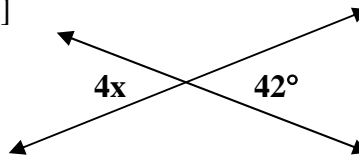
[3]



Relationship: _____

Equation: _____

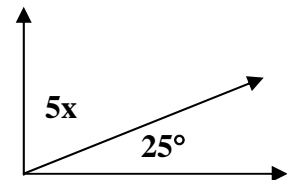
[4]



Relationship: _____

Equation: _____

[5]



Relationship: _____

Equation: _____