MATH NEWS

Grade 4, Module 4, Topic – C

4th Grade Math

Module 4: Topic C:

Problem Solving with the Addition of Angle Measures

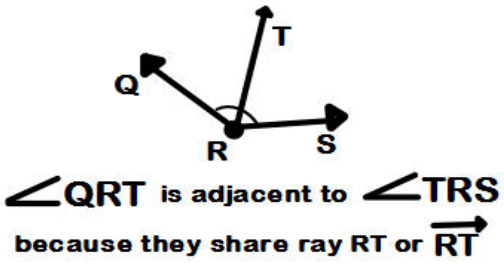
Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in Eureka Math (© 2013 Common Core, Inc.) that is also posted as the Engage New York material which is taught in the classroom. Module 4 of Eureka Math (Engage New York) covers angle measures and plane figures.

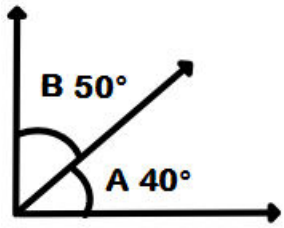
Words to Know:

Degree -measure of an angle Subdivide the length around a circle into 360 arcs of equal length. A central angle for any of these arcs is called a one-degree angle and is said to have angle measure of 1°.

Adjacent angle - two angles are adjacent if they have a common side and a common vertex (corner point) and don't overlap. Consider the example below.



Complementary angles - two angles with a sum of 90 °.



In this example, angle A measures 40° and angle B measures 50°. Together they form a 90° angle. They are complementary.

OBJECTIVES OF TOPIC B

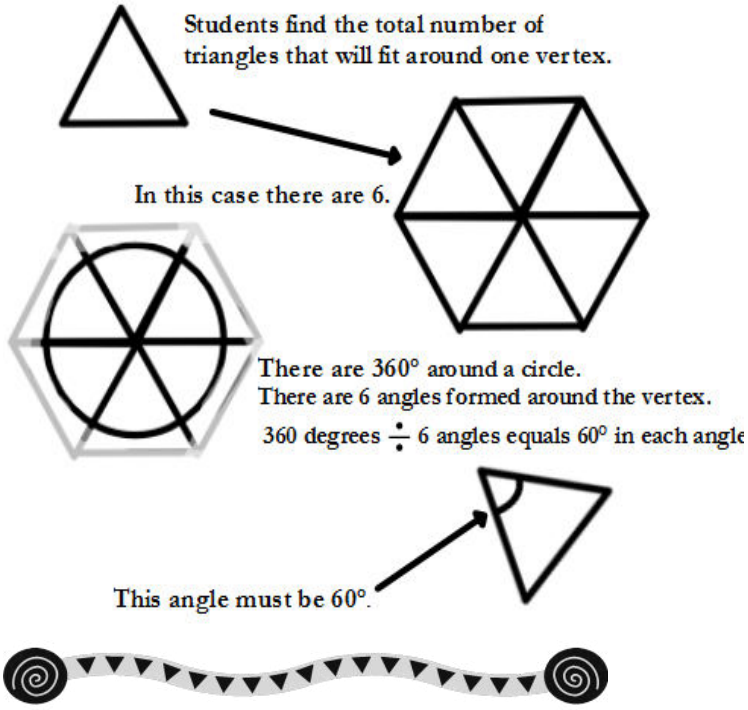
- Decompose angles using pattern blocks.
- Use the addition of adjacent angle measures to solve problems using a symbol for the unknown angle measure.

Focus Area– Topic C

Addition of Angle Measures

Example Problem and Answer

In class, students will use concrete examples to discover the additive nature of angle measure. Working with pattern blocks, they see that the measures of all of the angles at a point, with no overlaps or gaps, add up to 360 degrees, and they use this fact to find the measure of the pattern blocks' angles.



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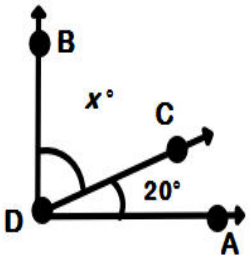
The students will write addition and subtraction equations to solve unknown angle problems.

Write an equation and solve for the measure of ∠BDC .



The student should see angle BDA is a 90° angle or a right angle. Since angle CDA has a measure of 20°, they can subtract the angle they know to find the unknown angle

$90° = 20° + X°$ or $90° - 20° = X°$

$X = 70°$