

Math 7 - Unit 5

Day 5 - Triangle Properties

Lesson Objectives:

- I can draw geometric shapes with given conditions.
- I can construct triangles from specific angles or sides.
- I understand which conditions can create one unique triangle, more than one triangle, or no triangle.

Triangle Inequality Investigation #1

Work with those at your table to complete the investigation. Remember to clean up your area when finished. (Put unused pieces of straw in the bowl at the back for the next class to use. All other pieces of straw should be in the garbage.)



Triangle Inequality Theorem

The sum of the lengths of any two sides of a triangle is greater than the third side.

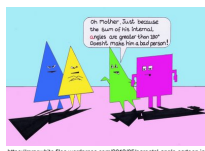


Can the three numbers be the measures of the sides of a triangle?

- | | | |
|------------|---------------|-------------|
| 1. 1, 2, 3 | 2. 21, 32, 18 | 3. 11, 6, 2 |
| no | yes | no |

Triangle Angle Sum Theorem

The sum of measures of the angles of a triangle is 180° .



Can the three numbers be the measures of the angles of a triangle?

- | | | |
|---------------|---------------|---------------|
| 4. 65, 50, 65 | 5. 34, 90, 52 | 6. 53, 37, 95 |
| no | no | no |

Triangle Angle Sum Theorem Investigation #2

Work with those at your table to complete the investigation. Remember to clean up your area when finished. (Put unused pieces of patty paper on the back table for the next class to use. All used pieces of patty paper should be in the garbage.)



Homework

Triangle Properties WKS

* Individual Think Time *



What to do if you get stuck...

1. Reread the problem. Did you write it down correctly?
2. Reread your notes. Is there a problem similar that we did together in class?
3. Find a problem similar in your book. Try this one to see if it helps.
4. Skip the problem until the end of Individual Think Time. Then ask an "educated" question of a neighbor or Mrs. Call.

Today we're working by...

