

Unit 7 Lesson 10: Drawing Triangles (Part 2)

1 Using a Compass to Estimate Length (Warm up)

Student Task Statement

1. Draw a 40° angle.
2. Use a compass to make sure both sides of your angle have a length of 5 centimeters.
3. If you connect the ends of the sides you drew to make a triangle, is the third side longer or shorter than 5 centimeters? How can you use a compass to explain your answer?

2 Revisiting How Many Can You Draw?

Student Task Statement

1. Draw as many different triangles as you can with each of these sets of measurements:
 - a. One angle measures 40° , one side measures 4 cm, and one side measures 5 cm.
 - b. Two sides measure 6 cm, and one angle measures 100° .
2. Did either of these sets of measurements determine one unique triangle? How do you know?

3 Three Angles

Student Task Statement

1. Draw as many different triangles as you can with each of these sets of measurements:
 - a. One angle measures 50° , one measures 60° , and one measures 70° .
 - b. One angle measures 50° , one measures 60° , and one measures 100° .
2. Did either of these sets of measurements determine one unique triangle? How do you know?