## Unit 7 Lesson 9: Drawing Triangles (Part 1)

### 1 Which One Doesn’t Belong: Triangles (Warm up)

#### Student Task Statement

Which one doesn’t belong?



### 2 Does Your Triangle Match Theirs?

#### Student Task Statement

Three students have each drawn a triangle. For each description:

* Draw a triangle with the given measurements.
* Measure and label the other side lengths and angle measures in your triangle.
* Decide whether the triangle you drew must be an identical copy of the triangle that the student drew. Explain your reasoning.
1. Jada’s triangle has one angle measuring $75^{∘}$.
2. Andre’s triangle has one angle measuring $75^{∘}$ and one angle measuring $45^{∘}$.
3. Lin’s triangle has one angle measuring $75^{∘}$, one angle measuring $45^{∘}$, and one side measuring 5 cm.

#### Activity Synthesis





### 3 How Many Can You Draw?

#### Student Task Statement

1. Draw as many different triangles as you can with each of these sets of measurements:
	1. Two angles measure $60^{∘}$, and one side measures 4 cm.
	2. Two angles measure $90^{∘}$, and one side measures 4 cm.
	3. One angle measures $60^{∘}$, one angle measures $90^{∘}$, and one side measures 4 cm.
2. Which of these sets of measurements determine one unique triangle? Explain or show your reasoning.



© CC BY Open Up Resources. Adaptations CC BY IM.