

INT2 2.2.1: 2-33b, 2-33c, 2-35a, 2-35b#1,& 2-35b#2 Student eTools

Click on the links below.

[2-33b Student eTool \(CPM\)](#)

[2-33c Student eTool \(CPM\)](#)

[2-35a Student eTool \(CPM\)](#)

[2-35b #1 Student eTool \(CPM\)](#)

[2-35b #2 Student eTool \(CPM\)](#)

1. INT2 2-33b:

INT2 2-33b

▼ Notes

INT2 2-33b

b) Can you make another triangle, with the same angles, that is not similar to your original triangle? Can you create any two triangles with the same three angle measures that are not similar?

Tip: Test your ideas with transformations!

► Show/Hide Labels

► Side Lengths and Ratios

The diagram shows two triangles, $\triangle ABC$ and $\triangle DEF$. Triangle $\triangle ABC$ has vertices A , B , and C . The angles are $\angle A = 62^\circ$, $\angle B = 38^\circ$, and $\angle C = 80^\circ$. Triangle $\triangle DEF$ has vertices D , E , and F . The angles are $\angle D = 38^\circ$, $\angle E = 80^\circ$, and $\angle F = 62^\circ$. The triangles are not similar because the corresponding angles are not in the same order.

2. INT2 2-33c:

CPM Similarity

INT2 2-33c

▼ Notes

INT2 2-33c

c) Describe a sequence of transformations to show that two triangles that have the same three angles are similar.

Transformations:
Drag triangles from the center to translate.
Click on the center of a triangle to access the

► Show/Hide Labels

► Side Lengths and Ratios

3. INT2 2-35a:

CPM Similarity

2-35a Student eTool

▼ Notes

INT2 2-35a

Is it possible to make a second triangle with two sides proportional to 4 cm and 5 cm, and an included angle of 20° that is not similar?

Note: A possible second triangle with sides 8 cm and 10 cm, and an included angle of 20° is given for you to test!

► Show/Hide Labels

► Side Lengths and Ratios

4. INT2 2-35b #1:

2-35b #1 Student eTool

▼ Notes

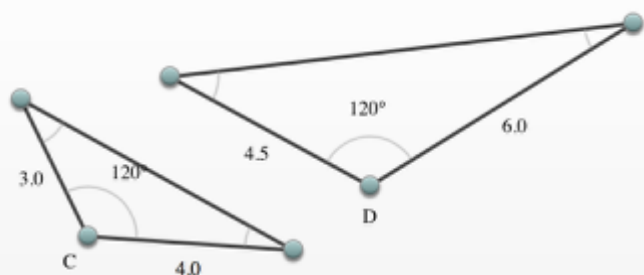
INT2 2-35b #1

Is it possible to make a second triangle with two sides proportional to 3 cm and 4 cm, and an included angle of 120° that is not similar?

Note: A possible second triangle with sides 6 cm and 8 cm, and an included angle of 120° is given for you to test!

► Show/Hide Labels

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5. INT2 2-35b #2:

CPM Similarity

2-35b #2 Student eTool

▼ Notes

INT2 2-35b #2

Is it possible to make a second triangle with two sides proportional to 3 cm and 4 cm, and an included angle of 90° that is not similar?

Note: A possible second triangle with sides 6 cm and 8 cm, and an included angle of 90° is given for you to test!

► Show/Hide Labels

► Side Lengths and Ratios

