

**Lab 08**Name: [WebCT Administrator \(Preview\)](#)Start time: [October 27, 2003 11:50am](#) | Number of questions: 12[Finish](#)[Help](#)

This set of questions goes with the pages of applets and activities for [Lab 08](#). Use the applets and activities there to answer the questions.

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**Question 1 (1 point)**

Refer to lab page 2. If you can form a triangle, which angle matches the angle between the red line segment and the blue line segment?

- ☐ a. The [cyan](#) angle
- ☐ b. The [green](#) angle
- ☐ c. The [yellow](#) angle
- ☐ d. The given segments do not form a triangle.

[Save answer](#)**Question 2 (1 point)**

Refer to lab page 2. Calculate the measure of the angle of question 1 to the nearest degree.

Answer

[Save answer](#)**Question 3 (1 point)**

Refer to lab page 3. If you can form a triangle, which angle matches the angle between the red line segment and the blue line segment?

- ☐ a. The [cyan](#) angle
- ☐ b. The [green](#) angle
- ☐ c. The [yellow](#) angle

- ☐ d. The given segments do not form a triangle.

Save answer

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#### Question 4 (1 point)

Refer to lab pages 2 and 3. What case of triangle solutions do the figures represent?

- ☐ a. ASA  
☐ b. ASS  
☐ c. SAS  
☐ d. SSS

Save answer

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#### Question 5 (1 point)

Refer to lab page 4. Use the angles and line segment on the left as components of an ASA triangle. Which two line segments on the right do you have to use in order to complete the triangle?

- ☐ a. red  
☐ b. cyan  
☐ c. magenta  
☐ d. blue

Save answer

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#### Question 6 (.5 points)

Refer to lab page 4. Calculate the length of the shortest side of the triangle to the nearest integer.

Answer

Save answer

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**Question 7 (1 point)**

Refer to lab page 5. Which line segment on the right is the missing side of the triangle?

- ☐ a. red
- ☐ b. cyan
- ☐ c. magenta
- ☐ d. blue

Save answer

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**Question 8 (.5 points)**

Refer to lab page 5. Calculate the length of the missing side to the nearest integer.

Answer

Save answer

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**Question 9 (1 point)**

Refer to lab page 6. If you put the long segment adjacent to the angle, there are two possibilities for the length of the third side. Position the components to find both possible lengths. Check two:

- ☐ a. black
- ☐ b. yellow
- ☐ c. blue
- ☐ d. cyan
- ☐ e. green

Save answer

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**Question 10 (.5 points)**

Refer to lab page 6. If you put the short segment adjacent to the angle, there is only one possibility for the length of the third side. Position the components to find that length. Check one

- ☐ a. black
- ☐ b. yellow
- ☐ c. blue
- ☐ d. cyan
- ☐ e. green

Save answer

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### Question 11 (.5 points)

Refer to lab page 6. Suppose the given angle is  $22.62^\circ$  and the given segments are of lengths 13 and 6.4. Calculate the measure of the largest angle, correct to the nearest degree.

Answer

Save answer

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### Question 12 (1 point)

The "Triangle Inequality" says that the sum of the lengths of any two sides of a triangle is longer than the length of the third side. Suppose that the short sides of a triangle are of lengths  $a$  and  $b$  and the longest side is of length  $c$ . What condition on  $a$ ,  $b$ , and  $c$  will guarantee that the triangle has an obtuse angle?

- ☐ a.  $a + b > c$
- ☐ b.  $a + b < c$
- ☐ c.  $a^2 + b^2 > c^2$
- ☐ d.  $a^2 + b^2 < c^2$
- ☐ e.  $a + b > 2c$
- ☐ f.  $a + b < 2c$

Save answer

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Finish

Help