

September 14, 2016

PROBLEM SET 1 – A

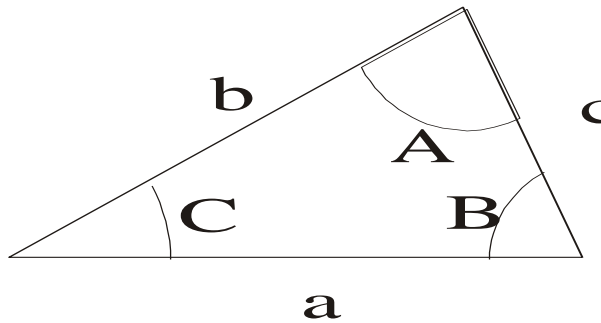
STUDENT NO: \_\_\_\_\_

PRINT NAME: \_\_\_\_\_

ENG 1440

Introduction to Statics

AO2: Dr. J. Frye



## Part#1 – GRAPHICAL SOLUTION

For the triangle shown and for the data given, FILL IN THE GAPS USING A GRAPHICAL SOLUTION. Estimate lengths to the nearest meter and angles to the nearest degree.  
(Show your work on separate sheets of grid paper and state the scale that you have used.)

	a (m)	b (m)	c (m)	A°	B°	C°
i	12				45	20
ii	6		9			60
iii(a)	12	9			30	
iii(b)	12	9			30	
iv	6	8	12			

## **Part#2 – TRIGONOMETRY SOLUTION**

For the triangle shown using the Sine and Cosine Rules and for the data given, FILL IN THE GAPS. Give answers to THREE decimals accuracy.  
(You do not have to include your work for this part.)

	<b>a (m)</b>	<b>b (m)</b>	<b>c (m)</b>	<b>A°</b>	<b>B°</b>	<b>C°</b>
<b>i</b>	<b>12</b>				<b>45</b>	<b>20</b>
<b>ii</b>	<b>6</b>		<b>9</b>			<b>60</b>
<b>iii(a)</b>	<b>12</b>	<b>9</b>			<b>30</b>	
<b>iii(b)</b>	<b>12</b>	<b>9</b>			<b>30</b>	
<b>iv</b>	<b>6</b>	<b>8</b>	<b>12</b>			