

- For each triangle, determine the missing information.
- Copy problems to a separate piece of paper, and show all work.
- Your answer should be accurate to 3 significant digits.
- Answers are posted at <http://weh.maritime.edu/mechanics>

1.  $a = 30$     $\alpha =$   
 $b = 20$     $\beta =$   
 $c =$     $\gamma = 90^\circ$

2.  $a = 58.48$     $\alpha =$   
 $b =$     $\beta = 28.05^\circ$   
 $c =$     $\gamma = 90^\circ$

3.  $a =$     $\alpha = 61.95^\circ$   
 $b =$     $\beta =$   
 $c = 87.31$     $\gamma = 90^\circ$

4.  $a =$     $\alpha =$   
 $b =$     $\beta = 20.23^\circ$   
 $c = 73.86$     $\gamma = 90^\circ$

5.  $a =$     $\alpha =$   
 $b = 55.69$     $\beta = 70.38^\circ$   
 $c =$     $\gamma = 90^\circ$

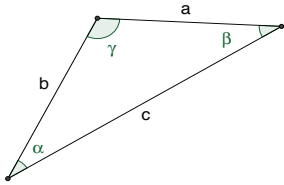
6.  $a = 24.64$     $\alpha =$   
 $b =$     $\beta =$   
 $c = 50.96$     $\gamma = 90^\circ$

7.  $a = 24.22$     $\alpha =$   
 $b = 43.82$     $\beta =$   
 $c =$     $\gamma = 90^\circ$

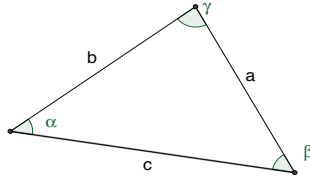
8.  $a =$     $\alpha = 30.98^\circ$   
 $b =$     $\beta =$   
 $c = 52.06$     $\gamma = 90^\circ$

9.  $a =$     $\alpha = 30.98^\circ$   
 $b =$     $\beta =$   
 $c = 42.04$     $\gamma = 90^\circ$

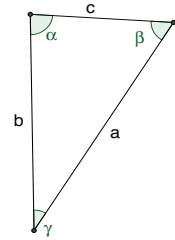
10.  $a = 36.84$   $\alpha =$   
 $b = 39.44$   $\beta =$   
 $c = 64.05$   $\gamma =$



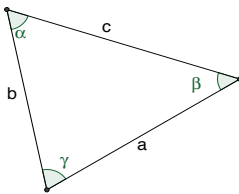
11.  $a = 62.12$   $\alpha =$   
 $b =$   $\beta = 52.37^\circ$   
 $c = 86.28$   $\gamma =$



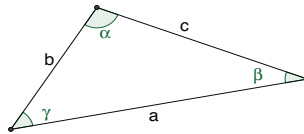
12.  $a =$   $\alpha = 85.52^\circ$   
 $b = 80.01$   $\beta =$   
 $c = 48.4$   $\gamma =$



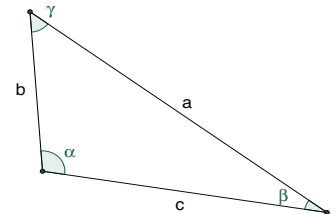
13.  $a = 64.31$   $\alpha = 60.44^\circ$   
 $b = 56.92$   $\beta =$   
 $c =$   $\gamma =$



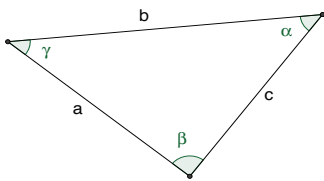
14.  $a =$   $\alpha = 102.31^\circ$   
 $b =$   $\beta = 30.99^\circ$   
 $c = 63.37$   $\gamma =$



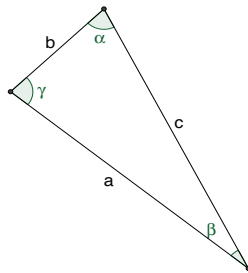
15.  $a =$   $\alpha = 103.14^\circ$   
 $b = 52.55$   $\beta =$   
 $c = ;$   $\gamma = 49.34^\circ$



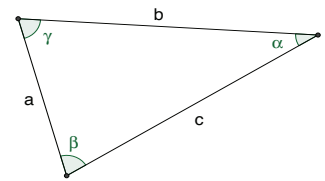
16.  $a = 46.81$   $\alpha = 47.79^\circ$   
 $b =$   $\beta = 87.73^\circ$   
 $c =$   $\gamma =$



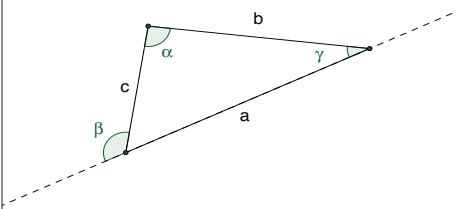
17.  $a = 61.3$   $\alpha =$   
 $b = 26.03$   $\beta =$   
 $c =$   $\gamma = 83.36^\circ$



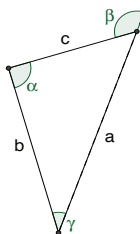
18.  $a =$   $\alpha =$   
 $b = 59.99$   $\beta = 74.16^\circ$   
 $c = 58.91$   $\gamma =$



19.  $a =$   $\alpha = 92.82^\circ$   
 $b =$   $\beta =$   
 $c = 47.4$   $\gamma = 31.41^\circ$



20.  $a = 79.01$   $\alpha =$   
 $b =$   $\beta = 126.96^\circ$   
 $c = 45.35$   $\gamma =$



21.  $a = 71.15$   $\alpha =$   
 $b = 60.38$   $\beta = 134.83^\circ$   
 $c =$   $\gamma =$

