

## Assignment

Name \_\_\_\_\_

Date \_\_\_\_\_

Period \_\_\_\_\_

Solve each triangle. Round your answers to the nearest tenth.

1)  $m\angle C = 27^\circ$ ,  $b = 11$ ,  $c = 9$   $2\Delta$

1)  $\angle A = 119.3$   $a = 17.3$   
 $\angle B = 33.7$   $b = 11$   
 $\angle C = 27^\circ$   $c = 9$

2)  $\angle A = 6.7$   $a = 2.3$   
 $\angle B = 146.3$   $b = 11$   
 $\angle C = 27^\circ$   $c = 9$

2)  $m\angle B = 47^\circ$ ,  $m\angle C = 28^\circ$ ,  $a = 37$

$\angle A = 105'$   $a = 37$   
 $\angle B = 47'$   $b = 28$   
 $\angle C = 28'$   $c = 18$

3)  $m\angle A = 126^\circ$ ,  $m\angle B = 20^\circ$ ,  $c = 18$

$m\angle C = 34^\circ$

$b = 11$

$a = 26$

4)  $m\angle A = 37^\circ$ ,  $c = 19$ ,  $a = 11$

NO  $\Delta$ 

5)  $m\angle A = 50^\circ$ ,  $c = 23$ ,  $a = 6$

NO  $\Delta$ 

6)  $m\angle B = 83^\circ$ ,  $m\angle C = 43^\circ$ ,  $a = 13$

$\angle A = 54'$   $a = 13$   
 $\angle B = 83'$   $b = 15.9$   
 $\angle C = 43$   $c = 11$

7)  $m\angle C = 48^\circ$ ,  $m\angle A = 106^\circ$ ,  $c = 17$

$\angle B = 26^\circ$

$a = 22$

$b = 10$

8)  $m\angle C = 112^\circ$ ,  $b = 24$ ,  $c = 7$

NO  $\Delta$

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1.)  $a \approx 3.23$   
 $b \approx 3.55$   
 $\alpha = 40^\circ$

3.)  $a \approx 3.25$   
 $c \approx 4.23$   
 $\beta = 45^\circ$

9.)  $\gamma = 120^\circ$   
 $b \approx 1.06$   
 $c \approx 2.69$

17.) 1  $\Delta$   
 $\beta \approx 30.7$   
 $\gamma \approx 99.3$   
 $c \approx 3.86$

19.) 1  $\Delta$   
 $\gamma \approx 36.2^\circ$   
 $\alpha \approx 43.8^\circ$   
 $a \approx 3.51$

21.) No  $\Delta$

23.) 2  $\Delta$   
 $\gamma \approx 30.9^\circ$   
 $\alpha \approx 129.1^\circ$   
 $a_1 \approx 9.08^\circ$

$\gamma \approx 149.1^\circ$   
 $\alpha \approx 10.9^\circ$   
 $a_2 \approx 2.21$

25.) No  $\Delta$

27.) 2  $\Delta$   
 $a \approx 57.7$   
 $\beta \approx 97.3^\circ$   
 $b \approx 2.35$

$\alpha \approx 122.3$   
 $\beta = 32.7$   
 $b \approx 1.28$

29.) a) Station Able  $\approx 143.31$  mi  
from ship  
Station Baker  $\approx 135.58$  mi  
from ship  
b.)  $\approx 41$  minutes

31) 1490.48 ft