

## Law of sines(Ambiguous) and area

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find each measurement indicated. Round your answers to the nearest tenth.**

1) In  $\triangle YZX$ ,  $m\angle Y = 31^\circ$ ,  $x = 32$  km,  $y = 23$  km  
Find  $z$

2) In  $\triangle FDE$ ,  $m\angle D = 103^\circ$ ,  $m\angle E = 13^\circ$ ,  $f = 24$  in  
Find  $e$

3) In  $\triangle STR$ ,  $m\angle S = 150^\circ$ ,  $m\angle T = 7^\circ$ ,  $s = 41$  in  
Find  $t$

4) In  $\triangle HPK$ ,  $m\angle H = 17^\circ$ ,  $k = 28$  m,  $h = 17$  m  
Find  $p$

5) In  $\triangle YZX$ ,  $m\angle Z = 36^\circ$ ,  $m\angle X = 66^\circ$ ,  $z = 9$  cm  
Find  $x$

6) In  $\triangle RST$ ,  $m\angle R = 30^\circ$ ,  $t = 25$  m,  $r = 22$  m  
Find  $s$

7) In  $\triangle ZXY$ ,  $m\angle X = 19^\circ$ ,  $m\angle Y = 33^\circ$ ,  $x = 12$  ft  
Find  $y$

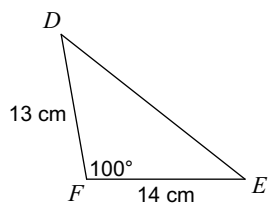
8) In  $\triangle PQR$ ,  $m\angle Q = 14^\circ$ ,  $m\angle R = 11^\circ$ ,  $p = 40$  yd  
Find  $r$

9) In  $\triangle FDE$ ,  $m\angle F = 152^\circ$ ,  $e = 33$  in,  $f = 11$  in  
Find  $d$

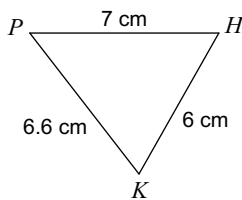
10) In  $\triangle QRP$ ,  $m\angle R = 49^\circ$ ,  $m\angle P = 63^\circ$ ,  $r = 22$  cm  
Find  $p$

Find the area of each triangle to the nearest tenth.

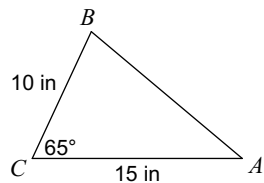
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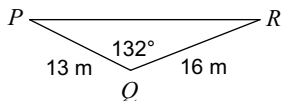
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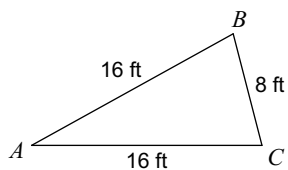
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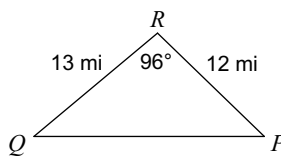
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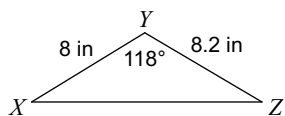
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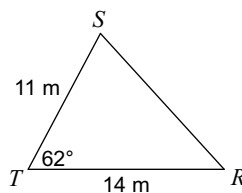
16)



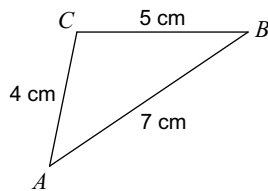
17)



18)



19)



20)

