

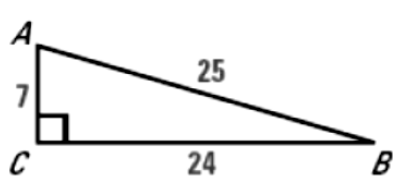
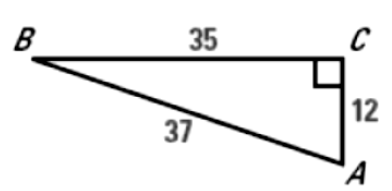
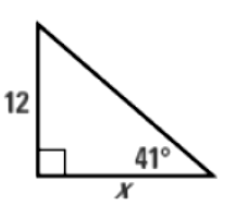
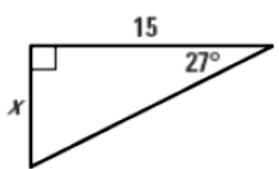
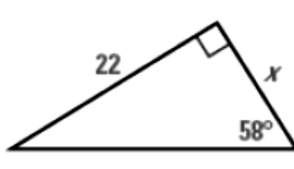
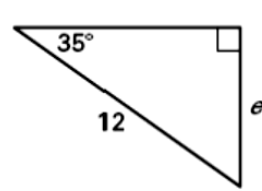
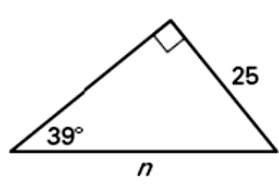
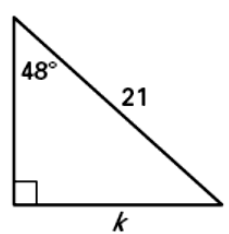
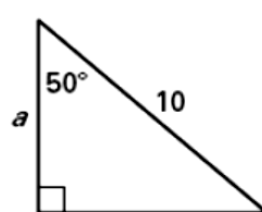
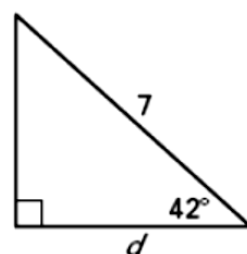
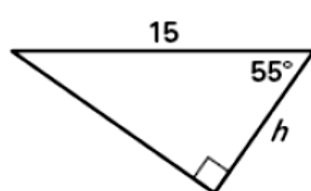
Unit 5: Right Triangle Trigonometry

Day 5 Worksheet (PH 9-1 and 9-2)

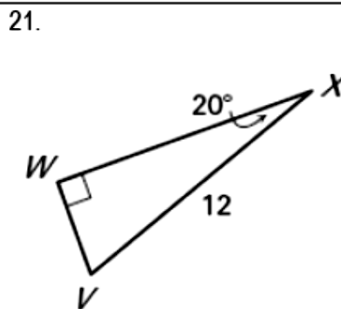
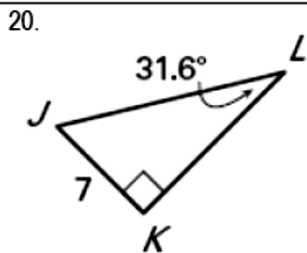
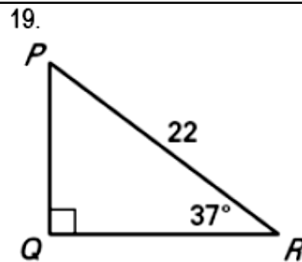
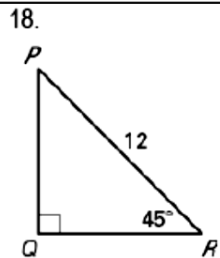
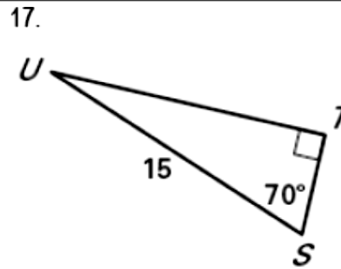
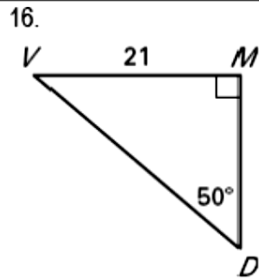
Name: _____

Date: _____ Hour: _____

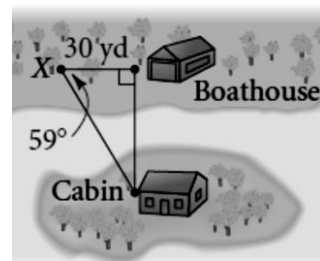
Complete each of the following exercises. Show work for full credit.

Find the following ratios using the given right triangles.					
<p>1.</p>  <p>Sin A = _____ Sin B = _____</p> <p>Cos A = _____ Cos B = _____</p> <p>Tan A = _____ Tan B = _____</p>	<p>2.</p>  <p>Sin A = _____ Sin B = _____</p> <p>Cos A = _____ Cos B = _____</p> <p>Tan A = _____ Tan B = _____</p>				
Use your calculator to evaluate each of the following. Round each to four decimal places.					
3. $\sin 63^\circ$	4. $\cos 24^\circ$	5. $\tan 86^\circ$	6. $\tan 42^\circ$		
Use the tangent ratio to find the variable.					
<p>7.</p> 	<p>8.</p> 	<p>9.</p> 			
Use the sine ratio to find the variable.					
<p>10.</p> 	<p>11.</p> 	<p>12.</p> 			
Use the cosine ratio to find the variable.					
<p>13.</p> 	<p>14.</p> 	<p>15.</p> 			

Solve the following right triangles. (Find all of the missing sides and angles.)



22. Surveying to find the distance from the boathouse on shore to the cabin on the island, a surveyor measures from the boathouse to point X as shown. He then finds $m\angle X$ with an instrument called a transit. Use the surveyor's measurements to find the distance from the boathouse to the cabin.



23. An escalator in the subway system of St. Petersburg, Russia, has a vertical rise of 195ft 9.5in and rises at an angle of 10.4° . How long is the escalator? Round your answer to the nearest foot.