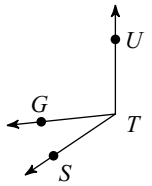
Math-2 Name_____ ID: 1

SM2 HW #7-6 (Trigonometric Ratios)

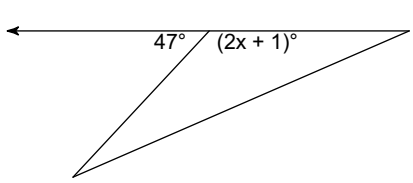
Date_____ Period____

1) $m\angle STU = 40x + 4$, $m\angle GTU = 33x - 3$, and $m\angle STG = 28°$. Find $m\angle GTU$.

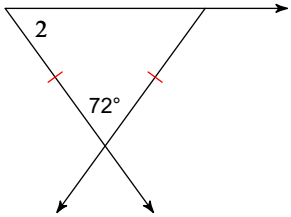


Find the value of x.

2)

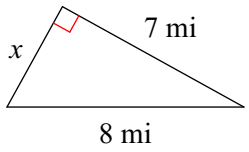


3) $m\angle 2 = 4x + 14$

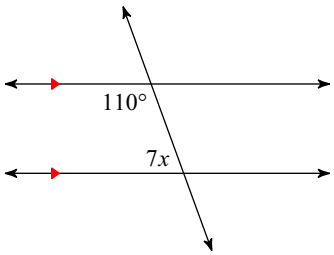


Find the missing side of each triangle. Leave your answers in simplest radical form.

4)

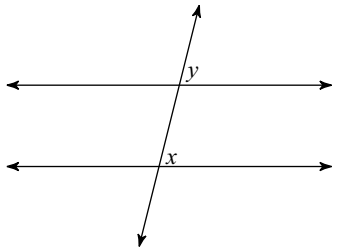


5)

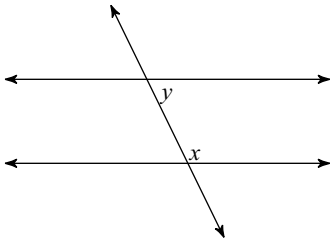


Identify each pair of angles as corresponding, alternate interior, alternate exterior, or consecutive interior.

6)

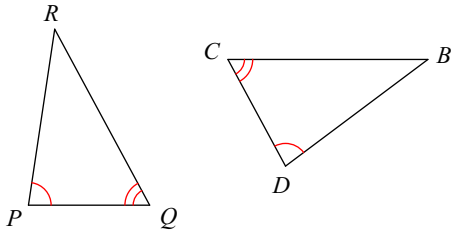


7)

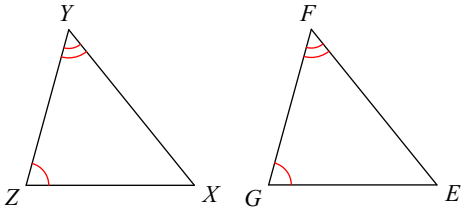


State what additional information is required in order to know that the triangles are congruent for the reason given.

8) ASA

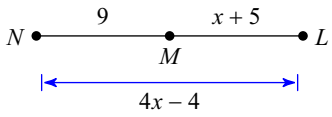


9) AAS



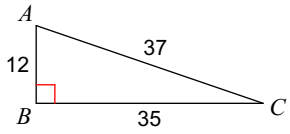
Find the length indicated.

10) Find *ML*

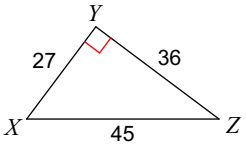


Find the value of each trigonometric ratio. Write the ratio as a simplified fraction.

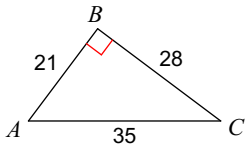
11) sin *C*



12) tan *X*

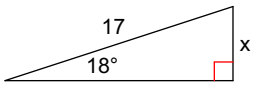


13) cos *A*

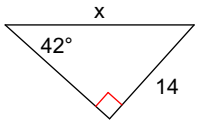


Find the missing side. Round to the nearest tenth.

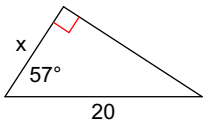
14)



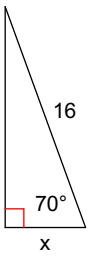
15)



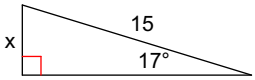
16)



17)



18)



19)