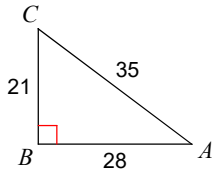
Geometry 1-2 Name_____

Assignment

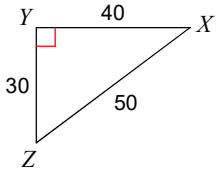
Date_____ Period____

Find the value of each trigonometric ratio. Leave your answers as simplified fractions.

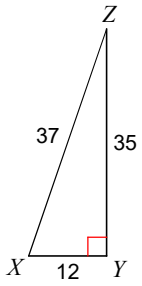
1) tan C $\frac{4}{3}$



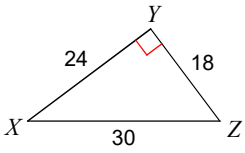
2) tan X $\frac{3}{4}$



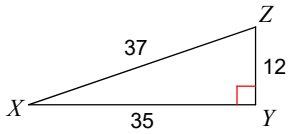
3) tan Z $\frac{12}{35}$



4) tan Z $\frac{4}{3}$

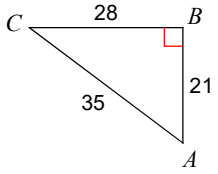


5) sin X

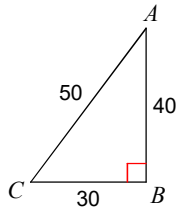


$\frac{12}{37}$

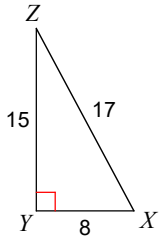
6) sin A $\frac{4}{5}$



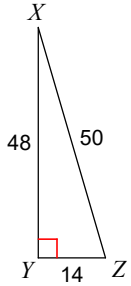
7) sin C $\frac{4}{5}$



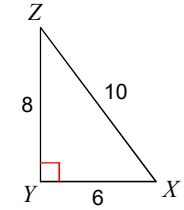
8) sin Z $\frac{8}{17}$



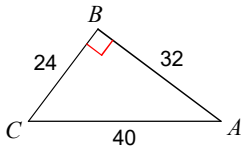
9) cos Z $\frac{7}{25}$



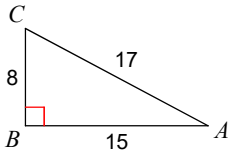
10) cos Z $\frac{4}{5}$



11) cos A $\frac{4}{5}$

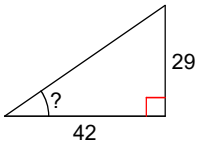


12) cos A $\frac{15}{17}$



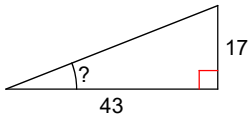
Find the measure of the indicated angle to the nearest degree.

13)



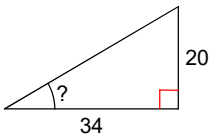
35°

14)



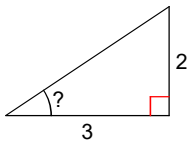
22°

15)



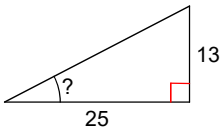
30°

16)



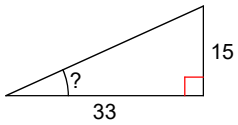
34°

17)



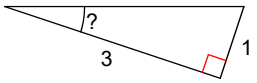
27°

18)



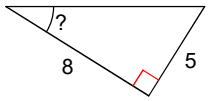
24°

19)



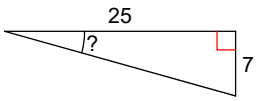
18°

20)



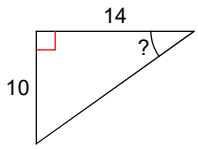
32°

21)



16°

22)



36°

Find each angle measure to the nearest degree.

23) tan C = 2.4751
68°

24) tan B = 1.3764
54°

25) cos C = 0.9135
24°

26) sin A = 0.9877
81°

27) cos X = 0.9744
13°

28) cos C = 0.8988
26°

29) sin A = 0.9397
70°

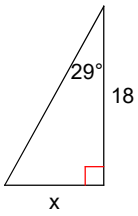
30) tan B = 11.4301
85°

31) tan C = 0.2867 16°

32) sin A = 0.9925 83°

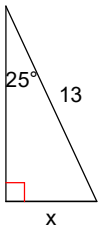
For each triangle, find the length of side *x*. Round your answers to the nearest tenth.

33)



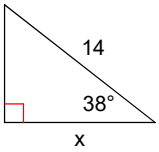
10.0

34)



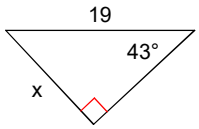
5.5

35)



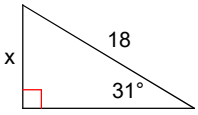
11.0

36)



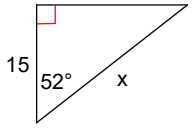
13.0

37)



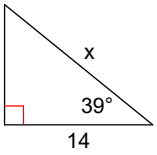
9.3

38)



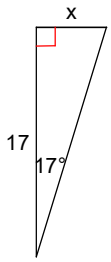
24.4

39)



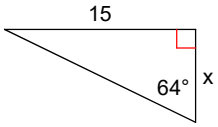
18.0

40)



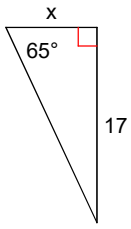
5.2

41)



7.3

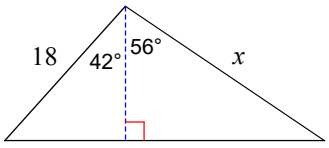
42)



7.9

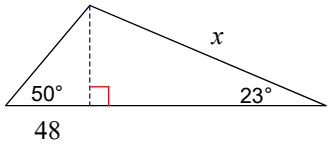
Find the length of the side labeled *x*. Round intermediate values to the nearest tenth. Use the rounded values to calculate the next value. Round your final answer to the nearest tenth.

43)



24

44)



146.4