Bellwork   Alg 2   Wednesday, April 22, 2020
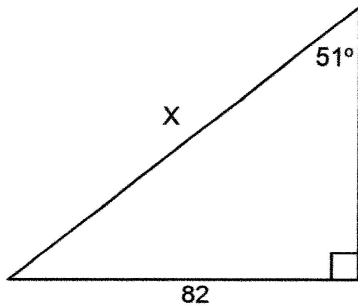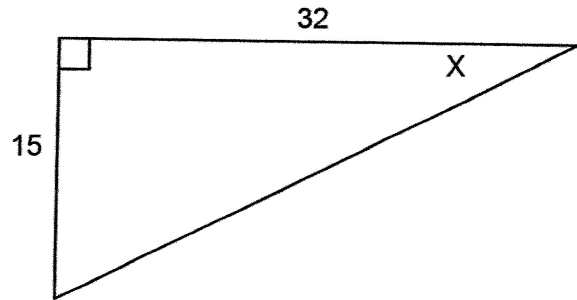
Find the value of x to the nearest hundredth.

1.

2.

3. Use the given triangle to find the following as ratios.

$\cot W =$

$\sec W =$

$\csc W =$

Answers

Find the value of x to the nearest hundredth.
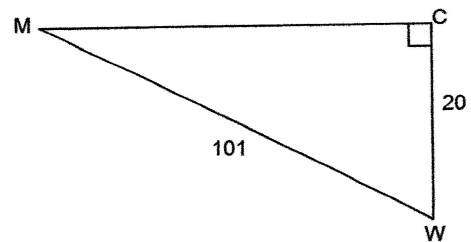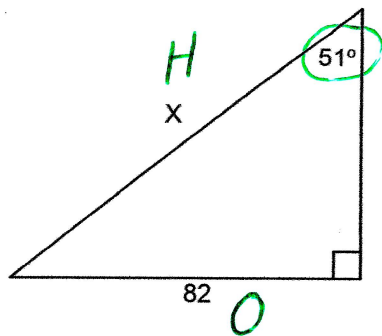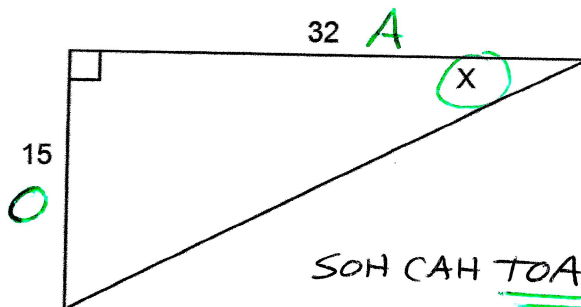
1.

H
51°
X
82
O

SOH CAH TOA

$$\sin 51° = \frac{82}{x}$$

$$\frac{}{1}$$

$$X = 105.51$$

2.

32 A
X
15
O

SOH CAH TOA

$$\tan X = \frac{15}{32}$$

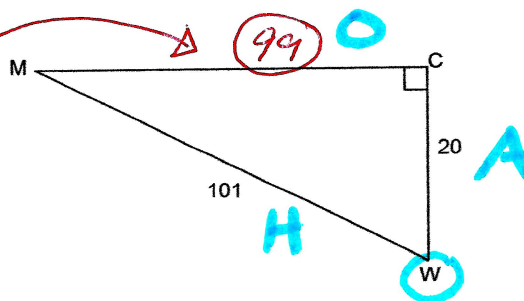$$X = \tan^{-1}\left(\frac{15}{32}\right)$$

$$X = 25.11°$$

3. Use the given triangle to find the following as ratios.

1ST find missing side:

$$x^2 + 20^2 = 101^2$$

$$\sqrt{x^2} = \sqrt{101^2 - 20^2}$$

$$x = 99$$

M
99
C
101
20 A
H
W

$$\cot W = \frac{20}{99} \longrightarrow \frac{1}{\tan W} \rightarrow \tan W = \frac{99}{20} \quad \text{SOH CAH TOA}$$

$$\sec W = \frac{101}{20} \longrightarrow \frac{1}{\cos W} \rightarrow \cos W = \frac{20}{101}$$

$$\csc W = \frac{101}{99} \longrightarrow \frac{1}{\sin W} \rightarrow \sin W = \frac{99}{101}$$

1