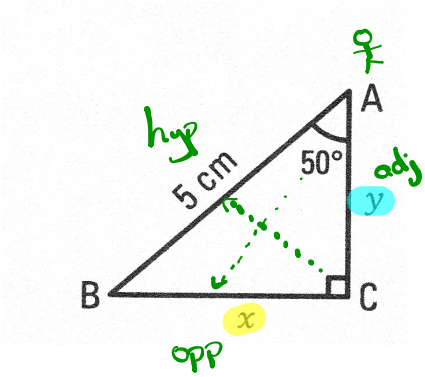
WarmUp

Find the missing sides.



Soh Cah Toa

① $\frac{\sin(50)}{1} = \frac{x}{5}$ $x = 3.83$

$\frac{0.76604}{1} = \frac{x}{5}$

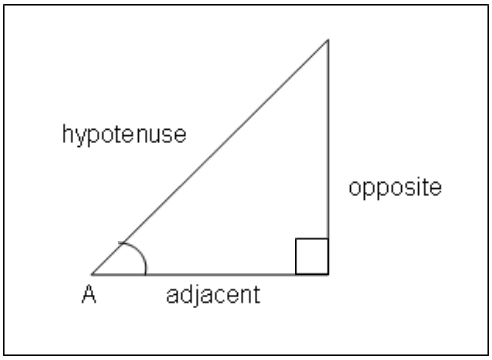
② $\frac{\cos(50)}{1} = \frac{y}{5}$ $y = 3.21$

$\sin(90) = 1$

Apr 17-9:28 AM

Trigonometric Ratios in a Right Δ

soh cah toa



$$\sin A = \frac{opp}{hyp}$$

$$\cos A = \frac{adj}{hyp}$$

$$\tan A = \frac{opp}{adj}$$

May 3-11:52 AM

Example 1:

1) Find x

2) Find y

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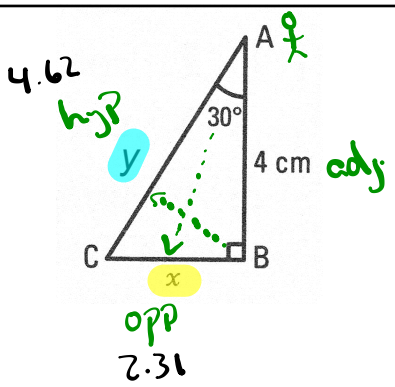
1) $\frac{\tan(30°)}{1} = \frac{x}{4}$

$x = 2.31$

2) $\frac{\cos(30°)}{1} = \frac{4}{y}$

$\frac{\cos(30°)y}{\cos(30°)} = \frac{4}{\cos(30°)}$

$y = 4.62$



30-60-90

Side opposite 30° = $\frac{\text{Hyp}}{2}$

May 3-1:10 PM

Finding Missing Angles using Trig Ratios

Example 1:

1) Find the measure of angle BAC

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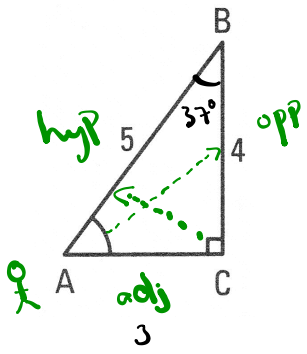
$\sin^{-1}(\sin x) = \sin^{-1}\left(\frac{4}{5}\right)$

$x = \sin^{-1}\left(\frac{4}{5}\right) = 53°$



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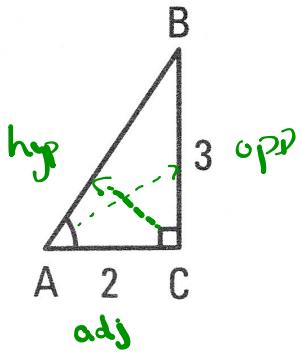
May 3-1:09 PM

Example 2:

1) Find the measure of angle BAC



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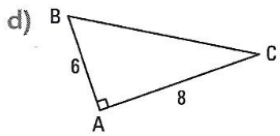
$\tan x = \frac{3}{2}$

$x = \tan^{-1}\left(\frac{3}{2}\right) =$

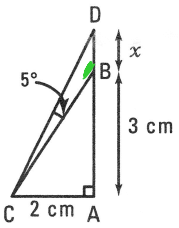
May 3-1:14 PM

d)



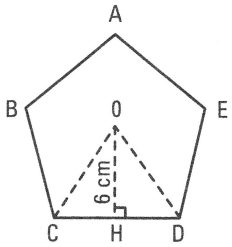
May 7-10:26 AM

12. Using the figure on the right, determine x.



May 8-9:37 AM

17. What is the area (rounded to the nearest tenth) of a regular pentagon with an apothem equal to 6 cm?



May 8-10:33 AM

Homework

Textbook #2

P. 85 #2

P. 96 #3-5

P. 97 #6-8

Apr 17-12:11 PM