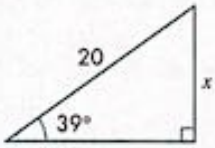
Basic Trigonometry

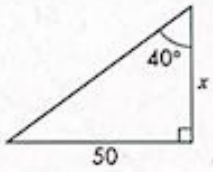
EXERCISE 6K

1 Find the length marked x in each of these triangles.

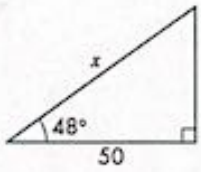
a



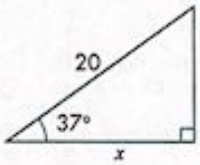
b



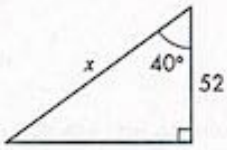
c



d



e



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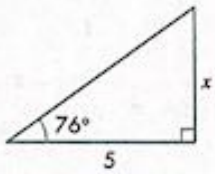
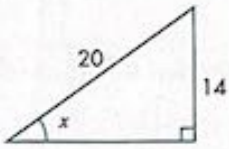
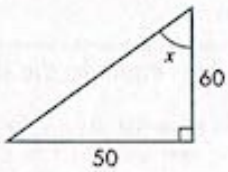


2 Find the angle marked x in each of these triangles.

a



b



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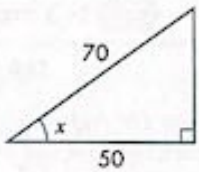

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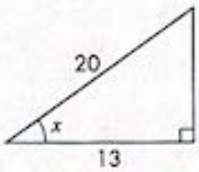

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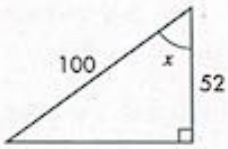

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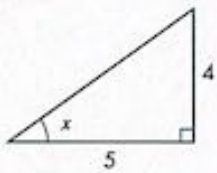
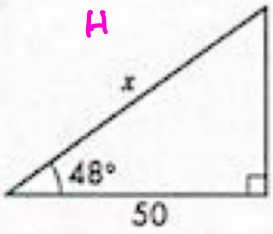


)

c



O

A

$\cos = \frac{A}{H}$

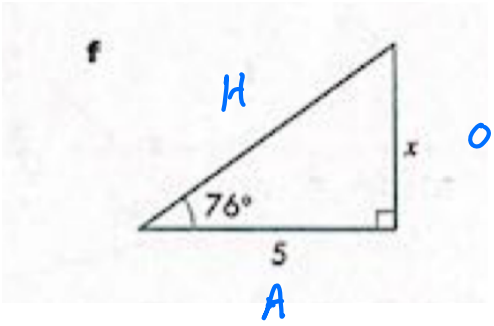
$\cos 48^\circ = \frac{50}{x}$

$x \cos 48^\circ = 50$

$x = \frac{50}{\cos 48^\circ}$

$x = 74.7$

1



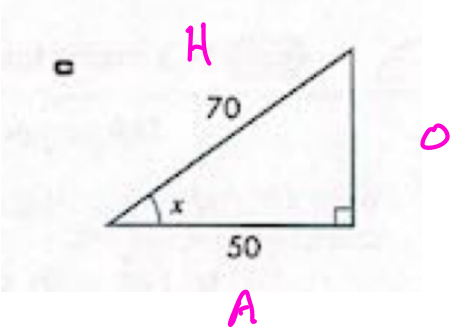
$\tan = \frac{O}{A}$

$\tan 76^\circ = \frac{x}{5}$

$5 \tan 76^\circ = x$

$x = 20.1$

2



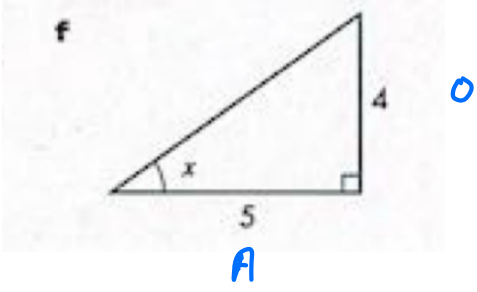
$\cos = \frac{A}{H}$

$\cos x = \frac{50}{70}$

$x = \cos^{-1}\left(\frac{50}{70}\right)$

$x = 44.4^\circ$

2



$\tan = \frac{O}{A}$

$\tan x = \frac{4}{5}$

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

$x = 38.7^\circ$

Classwork - complete Q1, Q2, Q3
