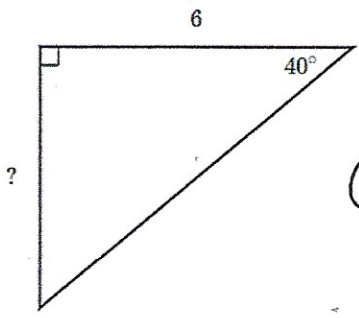


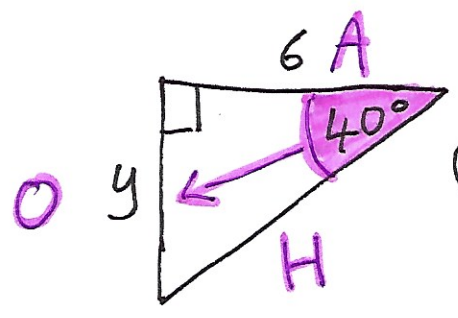
Additional Practice : Solving for a Side using trig ratios

ch 8.4

#1)



first label triangle with
 "O" for opposite
 "A" for adjacent
 "H" for hypotenuse



second) decide which trig ratio you need. It will be tan because we need to find "O" and we know "A"

third) solve for y

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

$$\tan 40^\circ = \frac{y}{6}$$

$$6 * \tan 40^\circ = y$$

$$\boxed{5.03} = y$$

rounded to 2 decimal places

$$6 * \tan(40) =$$

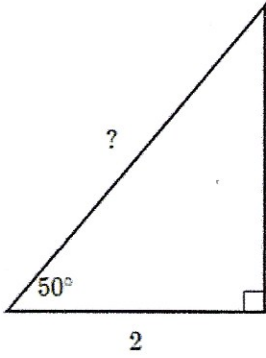
$$5.034597787$$

degrees →

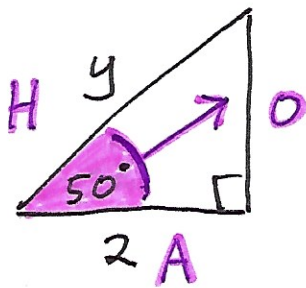
tan Key →

RAD		DEG		5.034597787	
sin ⁻¹	cos ⁻¹	tan ⁻¹	del	ac	
sin	cos	tan	√	x ^y	
e ^x	ln	log	π		
7	8	9	()	
4	5	6	×	÷	
1	2	3	+	-	
0	.	ans	=		

#2/



First label triangle with
 "O" for opposite
 "A" for adjacent
 "H" for hypotenuse



Second decide which trig ratio you need. It will be cos because we need to find "H" and we know "A"

Third Solve for y

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

$$\cos 50^\circ = \frac{2}{y}$$

$$y * \cos 50^\circ = 2$$

$$y = \frac{2}{\cos 50^\circ}$$

$$y = \boxed{3.11}$$

rounded to 2 decimal places

$$2/\cos(50) =$$

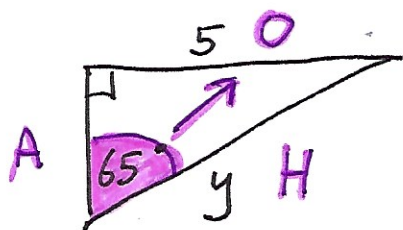
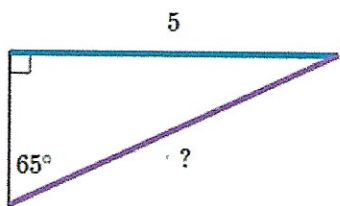
3.111447654

sin ⁻¹	cos ⁻¹	tan ⁻¹	del	ac
sin	cos	tan	√	x ^y
e ^x	ln	log	π	
7	8	9	()	
4	5	6	×	÷
1	2	3	+	-
0	.	ans	=	

degrees →

cos key

#3/



(first) label triangle with
 "O" for opposite
 "A" for adjacent
 "H" for hypotenuse

(second) decide which trig ratio you need. It will be sin because we need to find "H" and we know "O"

(third) solve for y

$$\sin x = \frac{O}{H}$$

$$\sin 65^\circ = \frac{5}{y}$$

$$y \times \sin 65^\circ = 5$$

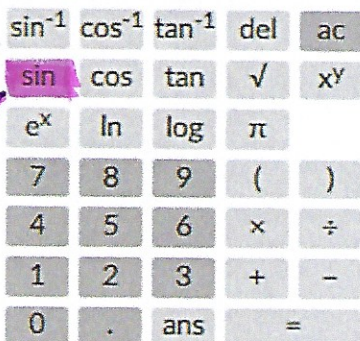
$$y = \frac{5}{\sin 65^\circ}$$

$$y = \boxed{5.52}$$

rounded to 2 decimal places

$$5/\sin(65) =$$

5.516889595



degrees →

sin key →