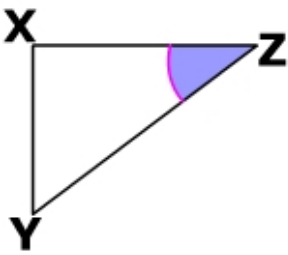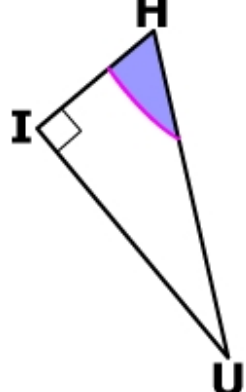# SOHCAHTOA WORKSHEET
(Sine, cosine and tangent)

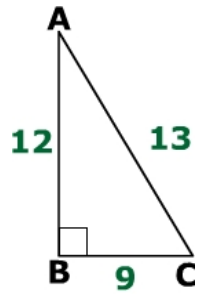**Part I**
Identifying Opposite, Adjacent and Hypotenuse
Answers available at www.mathwarehouse.com/trigonometry/sine-cosine-tangent.html
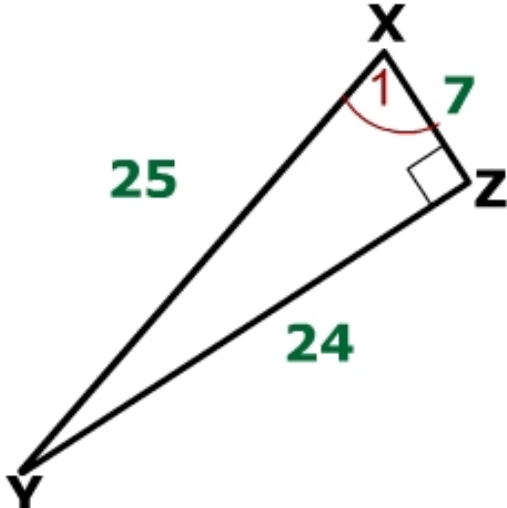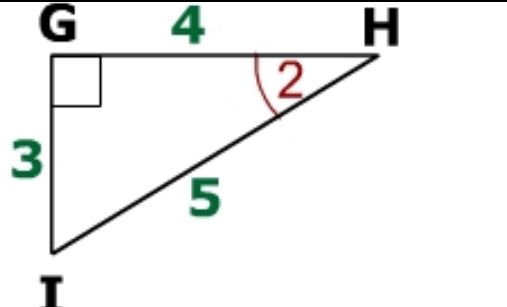
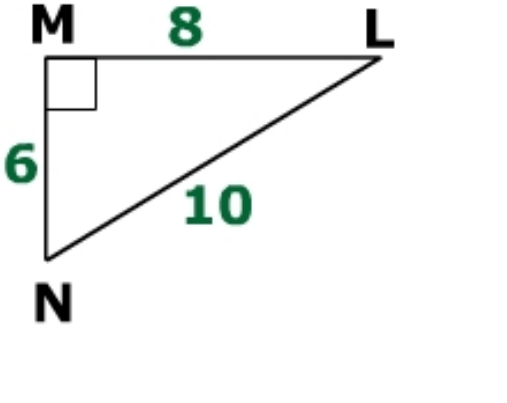|	
1. Identify the side that is opposite of ∠YZX _____ **2.** Identify the side that is adjacent to ∠YZX _____	
3. Identify the sides that are opposite and adjacent to ∠IHU. Opposite Side:_____ Adjacent Side:_____	

Part II
Answers @ www.mathwarehouse.com/trigonometry/sine-cosine-tangent-practice.html

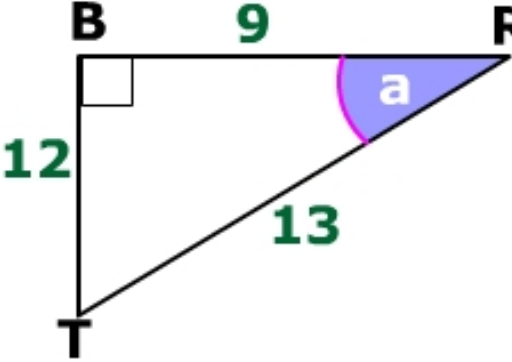|	
1. How long is the side opposite of ∠**ACB?** **2.** How long is the hypotenuse? **3.** What is $\sin(\angle ACB)$? **4.** How long is the side adjacent to ∠**ACB?** **5.** What is $\cos(\angle ACB)$?	

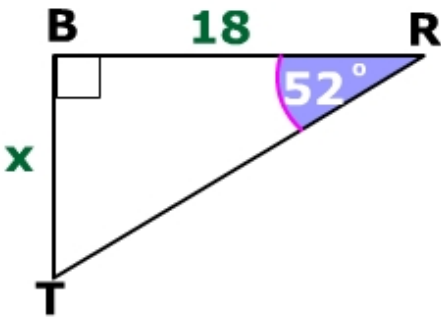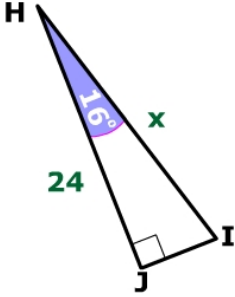|	
6. How long is the side opposite of ∠1**?** **7.** How long is the hypotenuse? **8.** What is sin(∠1)? **9.** How long is the side adjacent to ∠1**?** **10.** What is cos(∠1)?	X 1 7 25 Z 24 Y
11. What is cos(∠2)? **12.** What is sin(∠2)? **13.** What is tan(∠2)?	G 4 H 2 3 5 I

III. Sine, Cosine, Tangent. Problems
Answers @ www.mathwarehouse.com/trigonometry/sine-cosine-tangent-practice2.html

1. What side is adjacent to ∠MLN? **2.** What is the hypotenuse? **3.** Calculate cos(∠MLN): **4.** Calculate cos(∠LMN)	M 8 L 6 10 N
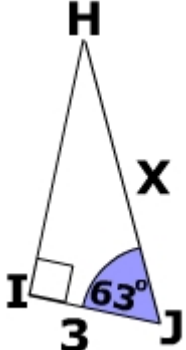
Find the sine, cosine and tangent of ∠a.

5. sin(a):_____

6. cos(a) :_____

7. tan(a) :_____

B　　　**9**　　　　**R**

12

13

T

More challenging Problems:

8. What is X?

9. How long is the hypotenuse of this triangle?

B　　**18**　　**R**

52°

x

T

10. What is X?

11. How long is the side IJ?
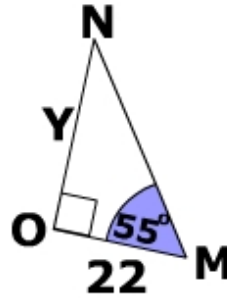
H

16°

x

24

I

J

IV Using SOHCAHTOA to find a side of a triangle.
Answers Below at www.mathwarehouse.com/trigonometry/sine-cosine-tangent-practice3.html

1) What is x in the triangle on the left?

2) What is the length of $\overline{HI}$?

H

X

I　**63°**　**J**

3

3. What is Y in the triangle on the left?

4. What is the length of $\overline{\textbf{NM}}$?

N

Y

O 〔55°〕 M

22

L

16°

X

48

N

M 14

5. Use SOHCAHTOA to find the value of X.

6. What is another way that you could find the value of X?