***DevilPhysics***

***Pre-DP Physics***

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period: \_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Baddest Class on Campus***

**TRIGONOMETRY FOR VECTORS WORKSHEET**

1. What is the cosine of 87°?

1. What is the arctangent (tan-1) of 1.276?

1. What is the sine of 43°?

1. What is the inverse cosine (cos-1) of 0.4862?

a

b

c

x

y

***Use the above diagram for all of the following problems. The triangle will not be proportional for all problems, but representative.***

1. If ∠y = 18˚, what is ∠x?

1. If ∠x = 68˚, what is ∠y?

1. If side a is 6in and side b is 8 in, how long is side c?

1. If side a is 3cm and c is 9cm, how long is side b?

1. If side b is 13 km and c is 29km, how long is side a?

1. If side a is 13 km and c is 29km, what is ∠y?

1. If side b is 4ft and c is 5ft, what is ∠y?

1. If side a is 129mm and b is 236mm, what is ∠y?

1. If side a is 19 km and c is 29km, what is ∠x?

a

b

c

x

y

1. If side b is 6ft and c is 8ft, what is ∠x?

1. If side a is 326mm and b is 896mm, what is ∠x?

1. ∠x = 67˚ and the hypotenuse is 32 in.
   1. How long is side b?

* 1. How long is side a?

1. ∠y = 17˚ and the hypotenuse is 24 in.
   1. How long is side a?

* 1. How long is side b?

1. ∠x = 56˚ and side b is 14m.
   1. How long is the hypotenuse?

* 1. How long is side a?

1. ∠y = 16˚ and side b is 34m.
   1. How long is the hypotenuse?

* 1. How long is side a?

a

b

c

x

y

1. If a=22ly and b=38ly,
   1. How long is the hypotenuse?

* 1. What is ∠x?

* 1. What is ∠y?

1. If a=98nm and ,
   1. What is ∠x?

* 1. How long is the hypotenuse?

* 1. What is side b?

1. If the hypotenuse is 56yds and ,
   1. What is ∠y?

* 1. How long is side b?

* 1. How long is side a?

1. If and , can you find the lengths of the three sides? Why or why not?