# PHYSICS REFERENCE SHEET #5

# Trigonometry

Basic trigonometry is used to determine the resultant side of a right-angled triangle.

## SOH CAH TOA

SIN = Opposite ÷ Hypotenuse

Opposite

Hypotenuse

COS = Adjacent ÷ Hypotenuse

TAN = Opposite ÷ Adjacent

θ

where…

Adjacent

## Pythagorean Theorem

a2 + b2 = c2

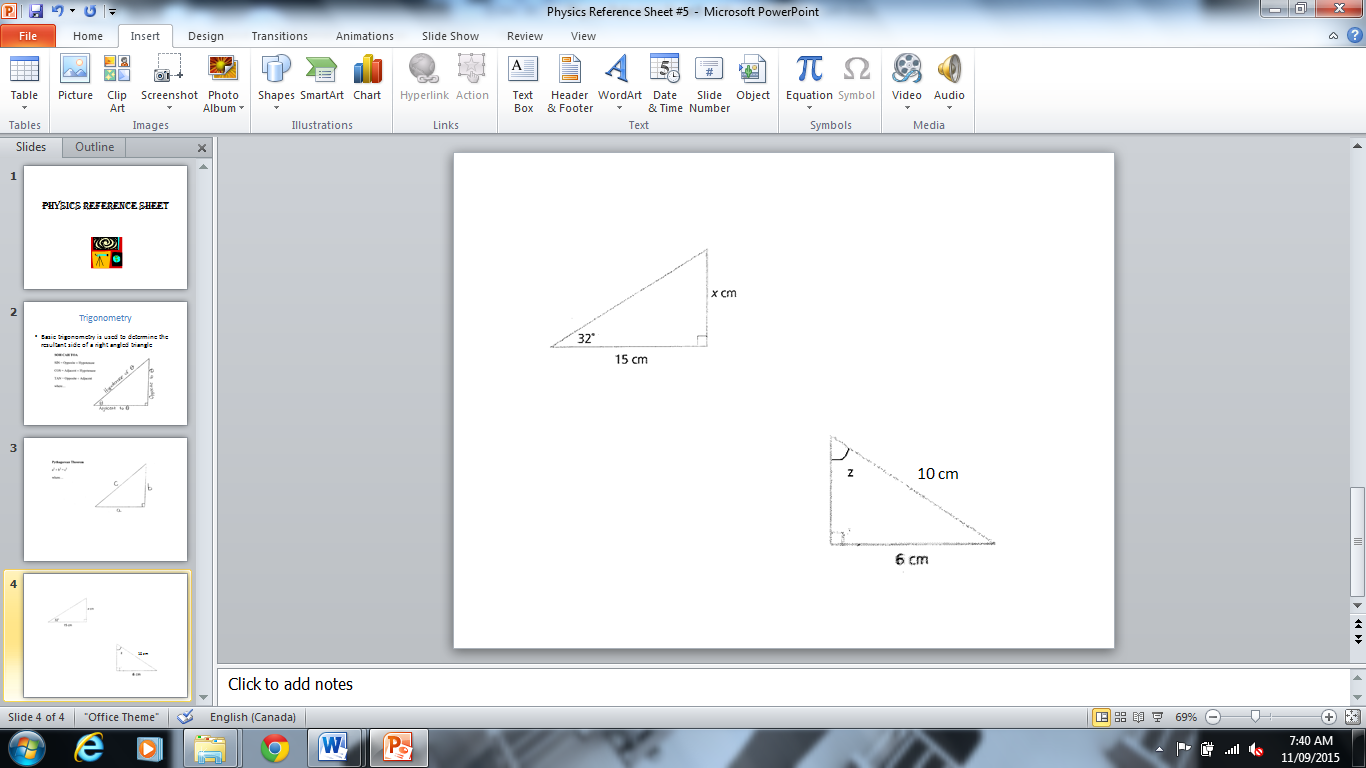
a

c

where …

b

Complete the Practice Questions below!

**Reference Sheet #5 -** **Practice**

Find the missing sides indicated

1.

35 m

39o

x

2.

19o

15 km

x

3.

1.5 x 10-6 m

x

50o

Find the missing angles indicated

1.

θ

97.3 m

87.45 m

2.

θ

45 cm

106.7 cm

3.

3.5 x 106 m

θ

9.6 x 105 m