MINI-LESSON#8: TRIGONOMETRY

TOPIC 1: CO-FUNCTIONS

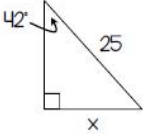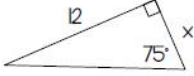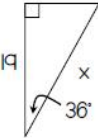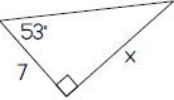|	A	B
sin		
cos		
tan		

$$sinA = cosB$$
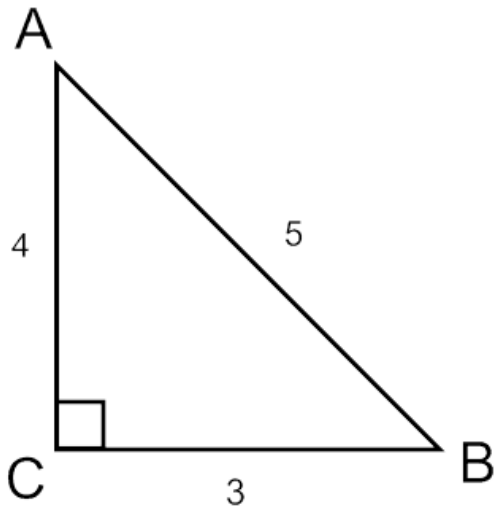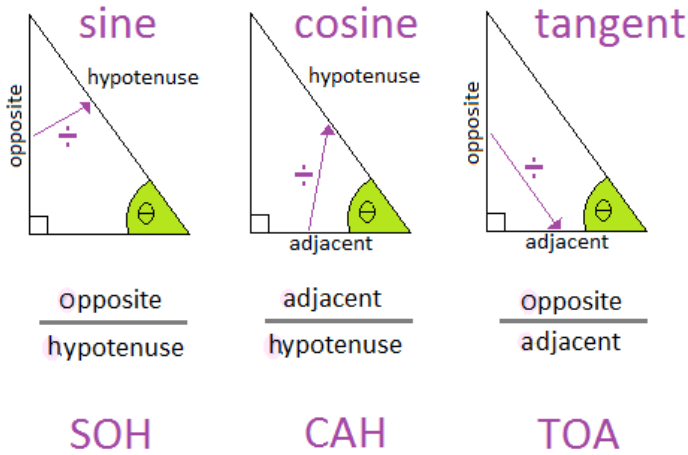
$$cosA = sinB$$

- The angles in a triangles sum to _____ degrees
- If angle C is a 90^0 angle, then A and B must sum to _____ degrees, making A and B _____ angles.
- Sine and Cosine are called _____. Meaning the sine of one acute angle will be equal to the cosine of its complement.
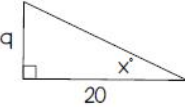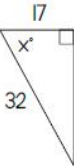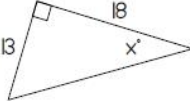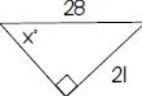
TOPIC 2: FINDING SIDES

STEPS:

1. Use SOHCAHTOA to determine which trig function you are using.

2. Set up proportion.

3. Cross multiply and solve for x.

EXAMPLE 1

42°
25
x

EXAMPLE 2

12
75°
x

Finding missing
SIDES with
TRIGONOMETRY

19
x
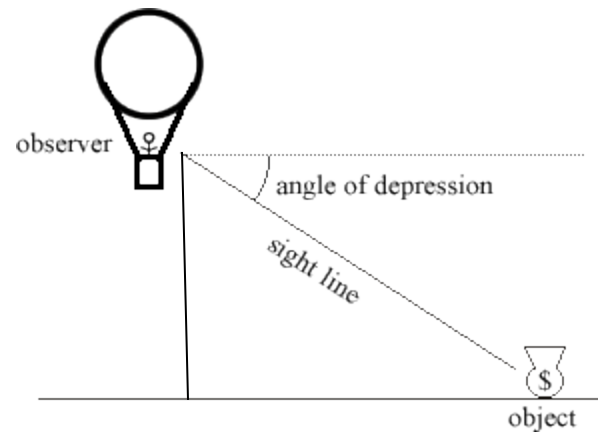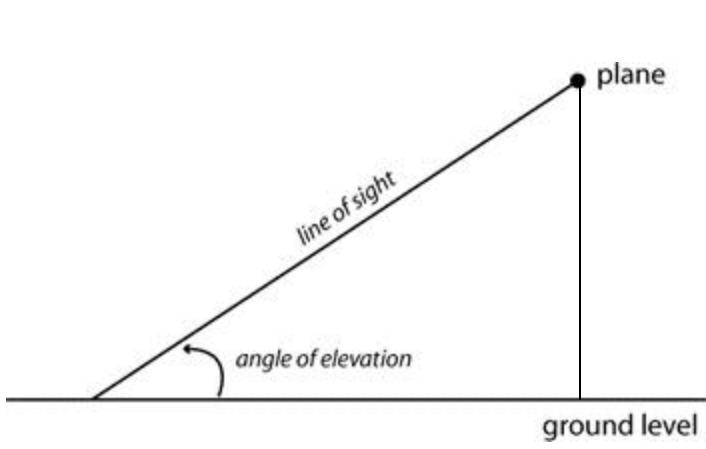36°

EXAMPLE 3

53°
7
x

EXAMPLE 4

TOPIC 3: FINDING ANGLES

STEPS:

1. Use SOHCAHTOA to determine which trig function you are using.

2. Set up proportion.

3. Using the 2nd button in your calculator, enter the ratio. ***DO NOT CROSS MULTIPLY***!

EXAMPLE 1

9
x°
20

EXAMPLE 2

17
x°
32

Finding missing
ANGLES with
TRIGONOMETRY

18
13
x°

EXAMPLE 3

28
x°
21

EXAMPLE 4

ANGLE OF ELEVLATION = ANGLE OF DEPRESSION