

Period #4

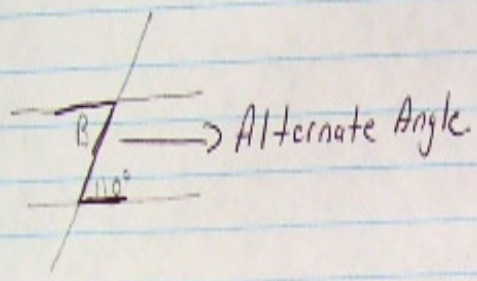
- i matches with d
- ii matches with c
- iii matches with a
- iv matches with b

* Note: For Mrs. Godfrey's period #2 class. Co-interior angles are not the same but they add up to 180° .

Period #2

- i and d
- ii and a
- iii and c
- iv and b

2



Answer is $\angle C = 110^\circ$

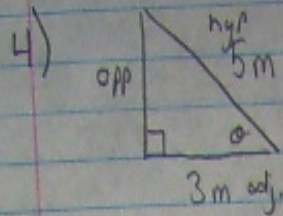
3) A Pythagorean triple is a set of positive integers that compliments the following equation $a^2 + b^2 = c^2$

a) $3^2 + 4^2 = 5^2$ b) $12^2 + 35^2 = 37^2$
 $9 + 16 = 25$ $144 + 1225 = 1369$
 True True

c) $16^2 + 63^2 = 65^2$
 $256 + 3969 = 4225$
 True

d) $33^2 + 56^2 = 64^2$
 $1089 + 3136 = 4096$
 Not true
 $1089 + 3136 = 4225$

D is the only answer in which $a^2 + b^2$ does not equal c^2



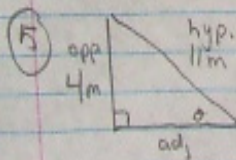
* I have my hypotenuse side and my adjacent side. Which Trig Function has the adjacent and hypotenuse sides in it?
Cosine!

$$\text{Cosine } \theta = \frac{3}{5}$$

$$\frac{\text{Cosine } \theta = 0.6}{\text{cosine cosine}} \rightarrow \text{(on calculator press 2nd function cos then type in 0.6)}$$

$$\theta = 53.1$$

The answer is (d) = 53

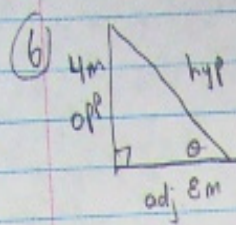


* which trig function has opposite and hypotenuse in it?
Sine!

$$\text{Sine } \theta = \frac{4}{11}$$

$$\frac{\text{Sin } \theta = 0.36}{\text{sin sin}} \rightarrow \theta = 21.3$$

The answer is (b) which is 21.



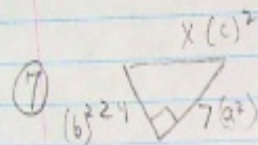
which Trig function has
the opposite and adjacent
sides?
Tan!

$$\tan \theta = \frac{4}{8}$$

$$\frac{\tan \theta}{\tan} = \frac{0.5}{\tan}$$

$$\theta = 26.5$$

The correct answer is 6 which is 26.5°



$$a^2 + b^2 = c^2$$

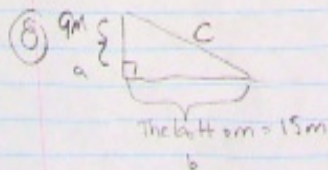
$$7^2 + 24^2 = c^2$$

$$49 + 576 = c^2$$

$$\sqrt{625} = \sqrt{c^2}$$

$$c = 25$$

* The answer is 25 which is 25.



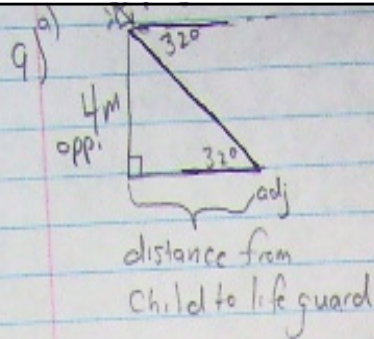
$$a^2 + b^2 = c^2$$

$$(9)^2 + (15)^2 = c^2$$

$$81 + 225 = c^2$$

$$\sqrt{306} = \sqrt{c^2}$$

$$c = 17.5 \text{ m}$$



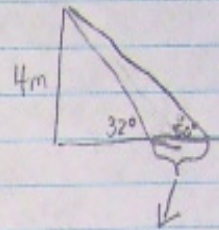
$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

$$\tan 32 = \frac{4}{x}$$

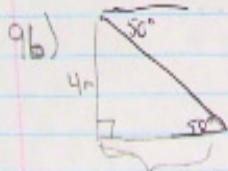
$$0.6249 = \frac{4}{x}$$

$$0.6249x = 4$$

$$x = 6.40$$



c) The distance from the two children is
 $6.40\text{m} - 3.35\text{m} = 3.05\text{m}$



Distance from lifeguard and child #2

$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

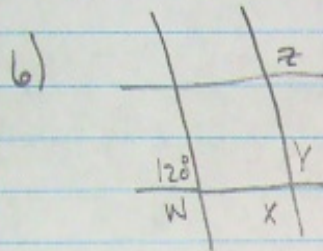
$$\tan 50 = \frac{4\text{m}}{x}$$

$$1.1917 = \frac{4\text{m}}{x}$$

$$4\text{m} = 1.1917x$$

$$x = 3.35\text{m}$$

10) a) $\frac{120^\circ}{X}$ $X = 60^\circ$



$W = 60^\circ$ ($180^\circ - 120^\circ = 60^\circ$)
 $X = 60^\circ$ (Corresponding angle with W)
 $Y = 60^\circ$ (Opposite angle with X)
 $Z = 60^\circ$ (Corresponding angle with Z)