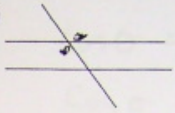


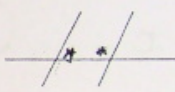
Name: Ariana Key Date: Jan. 8/2015

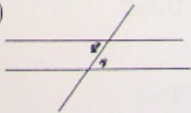
Trigonometry Test Review

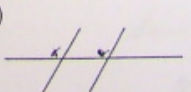
1) Match the diagram with the corresponding/correct type of angle provided.

- i) Corresponding Angles
- ii) Alternate Angles
- iii) Opposite Angles
- iv) Co-interior Angles

a)  (iii)

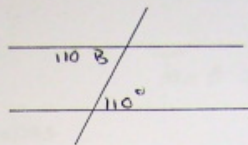
b)  (iv)

c)  (ii)

d)  (i)

NOTE: Questions #2-7 are all multiple choice. Circle the BEST correct answer which you have been provided with.

2) What is the value for the angle of B?



- a) 60° b) 70° c) 110° d) 35°

3) Which of the following answers do not represent a Pythagorean triple?

- a) 3, 4, 5 b) 12, 35, 37 c) 16, 63, 65 d) 33, 56, 64

$$16^2 + 63^2 = 65^2$$

$$256 + 3969 = 4225$$

$$4225 = 4225$$

$$33^2 + 56^2 = 64^2$$

$$1089 + 3136 = 4225$$

$$4225 \neq 4096$$

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

$$3^2 + 4^2 = 5^2$$

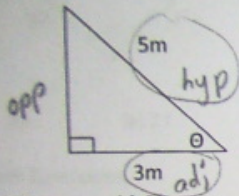
$$9 + 16 = 25$$

$$12^2 + 35^2 = 37^2$$

$$144 + 1225 = 1369$$

$$1369 = 1369$$

4) Find the value of Theta (θ) for the following question;



- a) 48° b) 62° c) 90° d) 53°

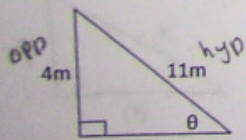
$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$\cos \theta = \frac{3}{5}$$

$$\cos \theta = 0.6$$

$$\theta =$$

5) Find the value of Theta (θ) for the following question;



- a) 15° b) 21° c) 42° d) 34°

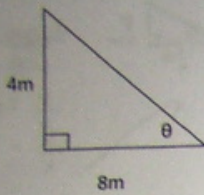
$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$\sin \theta = \frac{4}{11}$$

$$\sin \theta = 0.3636$$

$$\theta = 21^\circ$$

6) Find the value for Theta (θ) for the following question;



- a) 25.5 **b) 26.5** c) 27.5 d) 28.5
- = 26 = 27 = 28 = 29

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

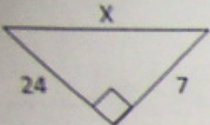
$$\tan \theta = \frac{4}{8}$$

$$\tan \theta = 0.5$$

$$\theta = 26.5$$

27

7)



a) 30 b) 27 c) 26 (d) 25

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

$$24^2 + 7^2 = x^2$$

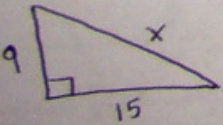
$$576 + 49 = x^2$$

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

$$25 = x$$

Short Answer Questions

8) The bottom of a wheelchair ramp is 15 meters long. The ramp is 9 meters high (from the bottom part of the ramp to the top part of the ramp). What is the length of the ramp that wheel chairs will roll on?



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

$$9^2 + 15^2 = x^2$$

$$81 + 225 = x^2$$

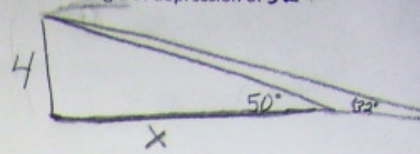
$$306 = x^2$$

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

$$17.5 = x$$

9) A lifeguard is sitting on the top of her safety chair, which is 4 meters high. The lifeguard sees a

9) A life guard is sitting on the top of her safety chair, which is 4 meters high. The lifeguard sees a first child at an angle of depression of 50° and a second child at an angle of depression of 32° .



a) How far is the first child away from the lifeguard?

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

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

$1.1918 = \frac{4}{x}$

$1.1918x = 4$

$x = 3.4$

b) How far is the second child away from the lifeguard?

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

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

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

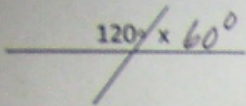
$0.6249x = 4$

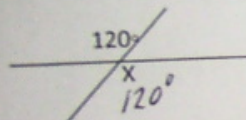
$x = 6.4$

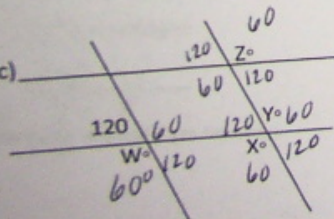
c) How far are the children away from one another?

$$\begin{array}{r} 6.4 \\ - 3.4 \\ \hline 3 \text{ m.} \end{array}$$

10) Write the correct value of the angles represented by the variables (w, x, y, and z)

a)  $x = 60^\circ$

b)  $x = 120^\circ$

c)  $w = 60^\circ$
 $x = 60^\circ$
 $y = 60^\circ$
 $z = 60^\circ$

