EXAM REVIEW...

- Chp. 6: Surface Area, Volume & Capacity

http://mvhs.nbed.nb.ca/sites/mvhs.nbed.nb.ca/files/noteattach//y2016/Jan/
_chp._6_test_-_surface_area_volume_and_capacity_oct._2015.pdf

- Chp. 7/8: Angle Properties & Trigonometry

http://mvhs.nbed.nb.ca/sites/mvhs.nbed.nb.ca/files/noteattach//y2016/Jan/
_chp._7_8_test_-_trigonometry_nov._2015.pdf

TOMORROW... Money Units: Chp. 1, 2 & 3

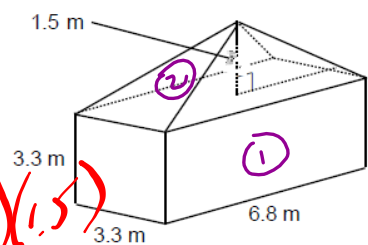* Check and Correct!!! Come with questions!

8. Determine the volume of this composite object, which is a right square prism and a right rectangular pyramid, to the nearest tenth of a cubic metre.

[A] 85.3 m^3

[B] 107.7 m^3

[C] 90.7 m^3

[D] 514.8 m^3

1.5 m

3.3 m

3.3 m

6.8 m

$V_① = 3.3 \times 6.8 \times 3.3$

$V_① = 74.052$

$V_② = \dfrac{3.3(6.8)(1.5)}{3}$
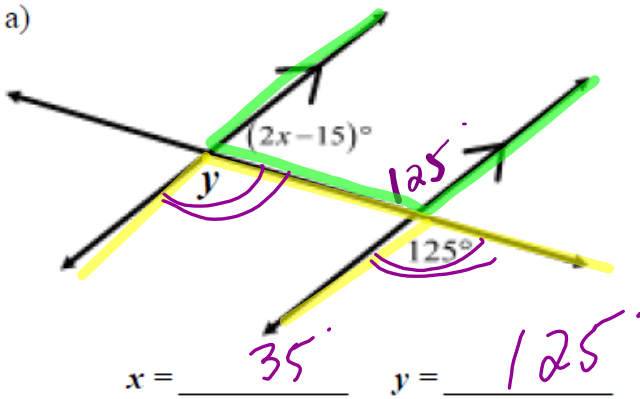
$= 11.22$

$V_{total} \Rightarrow 74.052 + 11.22$

$= 85.3 \, m^3$

3. Determine the value for x and y in each of the following. Show all

a)

$(2x-15)°$

y

$125°$

$125°$

125

125

$35°$

$x =$ ___35___ $y =$ ___125___

$(2x-15°) + 125 = 180°$

$2x + 110 = 180° \quad -110$
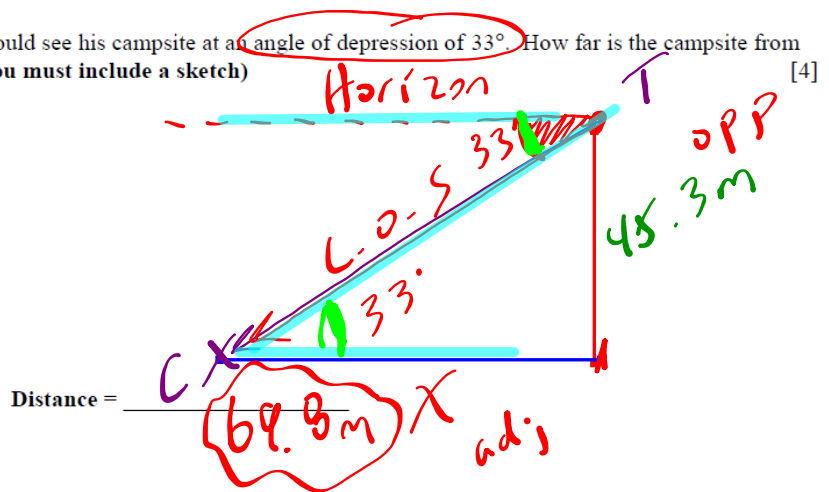
-110

$2x = 70°$

$\dfrac{2x}{2} = \dfrac{70}{2}$

$x = 35°$

4. From the top of a tower 45.3 m high, Terry could see his campsite at an angle of depression of 33°. How far is the campsite from the tower?   **(You must include a sketch)**   [4]

$$\tan 33° = \frac{45.3}{x}$$

$$x = \frac{45.3}{\tan 33°}$$

$$x = 69.8$$

Horizon

C.0.S 33°

33°

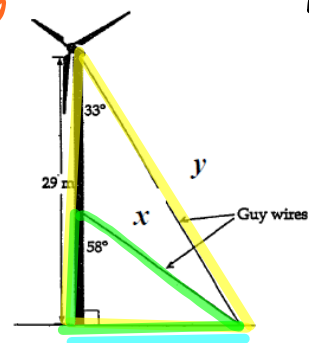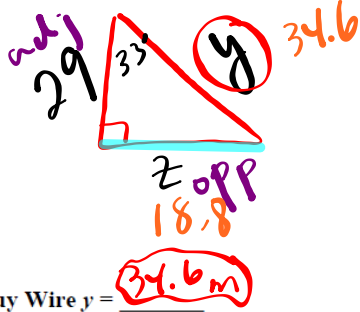45.3m   opp

33°

Distance = _____ 69.8m _____   x   adj

5. A windmill on a farm is supported by two guy wires, as shown below. **Find the lengths of the two guy wires.**   [6]

$\cos 33 = \dfrac{29}{y}$

$y = \dfrac{29}{\cos 33}$

$y = 34.6\,m$

adj 29 $33°$ y 34.6

z opp

18.8

Guy Wire $x =$ $\boxed{22.2\,m}$ **Guy Wire** $y =$ $\boxed{34.6\,m}$

$\overset{29}{\tan 33°} = \dfrac{z\,(29)}{29}$

$18.8 = z$

$\sin 58° = \dfrac{18.8}{x}$

$x = \dfrac{18.8}{\sin 58}$

$x = 22.2\,m$ 18.8 opp

58 x hyp?

z