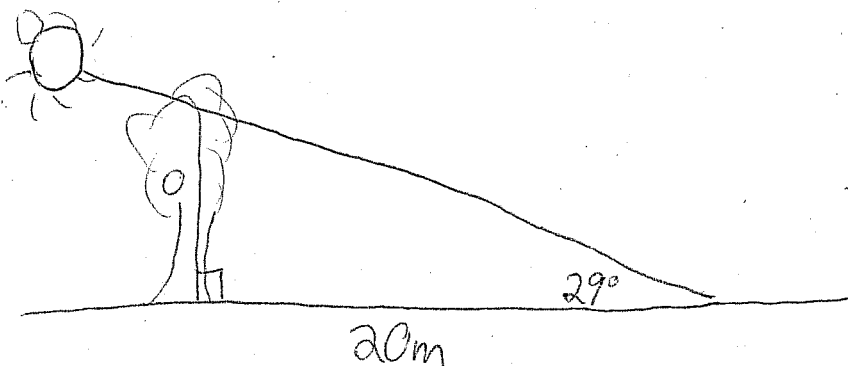Name: _Yann Lamontagne_

Student ID: _____

Quiz 9

This quiz is graded out of 10 marks. No books, notes, graphing calculators or cell phones are allowed. You must show all your work, the correct answer is worth 1 mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

Question 1. pg.150#10e *(4 marks)*
A tree casts a 20 *m* long shadow when the angle of elevation of the sun is 29°. How tall is the tree?

$$\tan \theta = \frac{o}{a}$$

$$\tan 29° = \frac{o}{20}$$

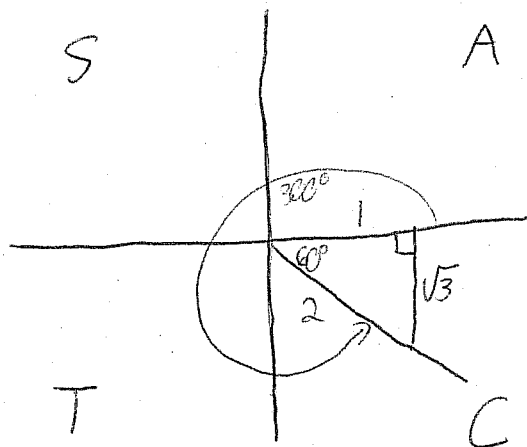$$o = 20 \tan 29°$$

$$o = 11.09 m$$

∴ the height of the tree is 11.09m.

Question 2. pg.153#a *(6 marks)*
Find the exact value of sec 300°.

S   A

T   C

the value is positive since sec and cos are positive in the IV quadrant

$$\sec 300° = \frac{h}{a} = \frac{2}{1} = 2$$