

Foundations and Pre-Calculus Math 10
Unit 1 - Checkpoint Assignment

Name: _____

Block: _____

1. Find each of the following to 3 decimal places.

(a) $\sin 27^\circ$

(b) $\cos 56^\circ$

(c) $\tan 78^\circ$

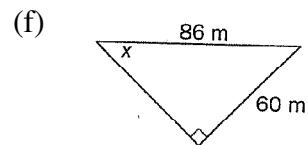
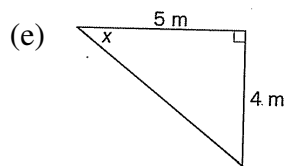
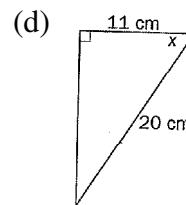
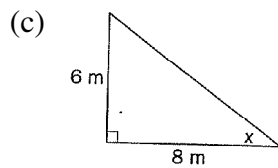
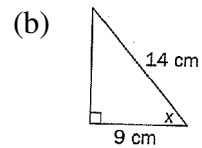
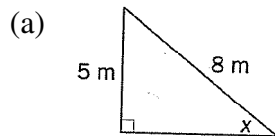
2. Find the measure of each angle, to the nearest degree.

(a) $\sin D = 0.602$

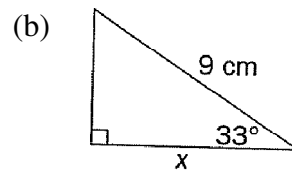
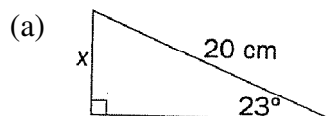
(b) $\cos Z = 0.309$

(c) $\tan X = 0.445$

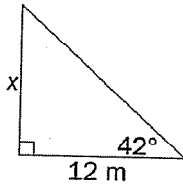
3. Find the measure of angle X, to the nearest degree.



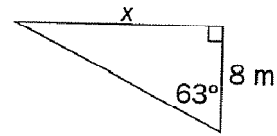
4. Calculate the length of side x to the nearest tenth.



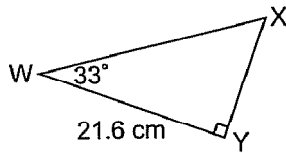
(c)



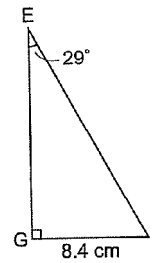
(d)



(e) Find side WX



(f) Find side EF



5. In $\triangle DEF$, $\angle E = 90^\circ$, $DF = 11.5\text{ cm}$ and $DE = 2.7\text{ cm}$. Find the measure of $\angle D$, to the nearest tenth of a degree. Draw the triangle.

6. A goal post casts a shadow that is 3.6 m long. The angle of elevation of the sun is 39° . What is the height of the goal post, to the nearest tenth of a metre? Sketch a diagram.

7. In $\triangle FGH$, $\angle H = 90^\circ$, $FH = 6\text{ cm}$ and $\angle F = 31^\circ$, find the area of the triangle to the nearest tenth of a square cm. Sketch a diagram.