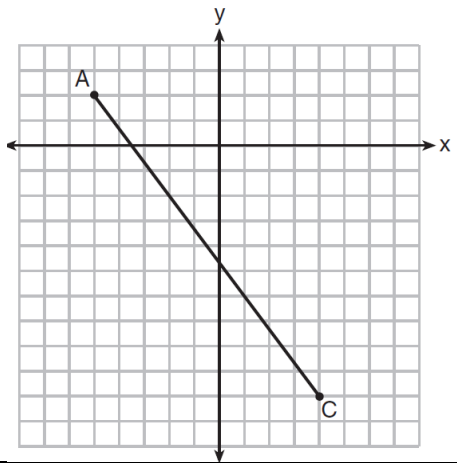
Name _____ **DUE DATE:** **Quiz on 5/24 and 5/25**

GEOMRCC Regents Review 9

Directions ***The Regents reviews will no longer be handed in. There will be a 2 question quiz on these questions on the last day of class in each week. You will have exactly 10 minutes to complete the quiz.***

1) In the diagram below, AC has endpoints with coordinates $A(-5,2)$ and $C(4,-10)$.

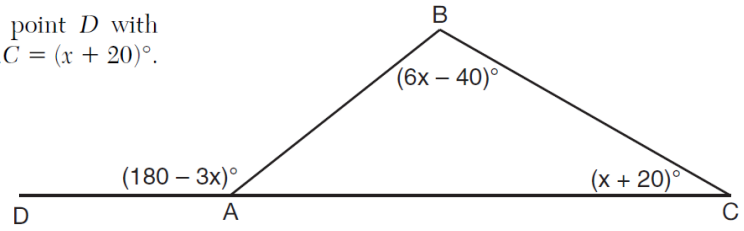
If B is a point on $\overline{AC}$ and $AB{:}BC = 1{:}2$, what are the coordinates of B?



2) An ice cream waffle cone can be modeled by a right circular cone with a base diameter of 6.6 centimeters and a volume of 54.45 π cubic centimeters. What is the number of centimeters in the height of the waffle cone?

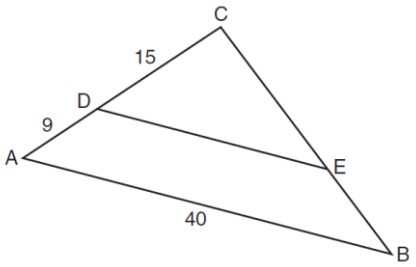
3) In $\triangle ABC$ shown below, side $\overline{AC}$ is extended to point D with $m\angle DAB = (180 - 3x)°$, $m\angle B = (6x - 40)°$, and $m\angle C = (x + 20)°$.

Solve for x.



4) In the diagram of $\triangle ABC$ below, $\overline{DE}$ is parallel to $\overline{AB}$, $CD = 15$, $AD = 9$, and $AB = 40$.

Find DE.



5) In right ΔABC, $m\angle C = 90°$, $\sin A = x + 0.1$ and $\cos B = 2x - 0.4$.

a) Find x. b) Find value to nearest degree for angle A.

Answers: 1) (-2, -2) 2) 15 cm 3) 20 4) 25 5) a) 0.5 b) 37°