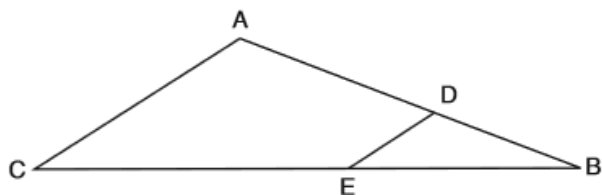


GEOM RCC Regents Review 5

Directions ☀ There will be a 2 question quiz on these questions on the last day of class in each week. Dates are posted above!!! PRACTICE THESE and CHECK YOUR ANSWERS! You ☀ have exactly 10 minutes to complete the quiz.

- 1) In the diagram of $\triangle ABC$ below, points D and E are on sides \overline{AB} and \overline{CB} respectively, such that $\overline{DE} \parallel \overline{AC}$.



If \overline{EB} is 3 more than \overline{DB} , $AB = 14$, and $CB = 21$, what is the length of \overline{AD} ?

- 2) Using coordinate geometry, prove that $\overline{MA} \parallel \overline{TH}$.

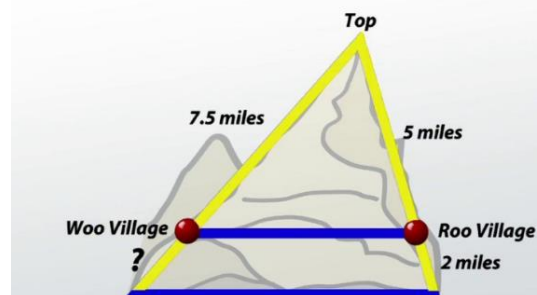
The vertices of quadrilateral $MATH$ have coordinates $M(-4,2)$, $A(-1,-3)$, $T(9,3)$, and $H(6,8)$.

- 3) Using coordinate geometry, prove that \overline{MT} is congruent to \overline{AH} .

The vertices of quadrilateral $MATH$ have coordinates $M(-4,2)$, $A(-1,-3)$, $T(9,3)$, and $H(6,8)$.

- 4) Write an equation of the line that is parallel to the line whose equation is $5y + 8 = 3x$ and passes through the point $(-3, 7)$.

- 5) Given the segment from Woo village to Roo village is parallel to the base, find the part of the side labeled with a “?”.



Ans. 1) 8 2) both slopes are $-\frac{5}{3}$, so they are parallel 3) both lengths are $\sqrt{170}$, so they are congruent 4) $y - 7 = \frac{3}{5}(x+3)$
5) ? = 3

<https://youtu.be/jRYXtWZ545k>