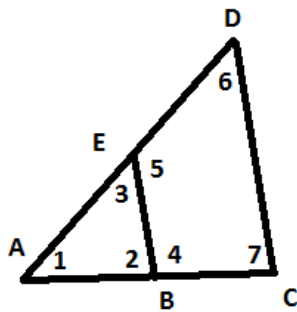


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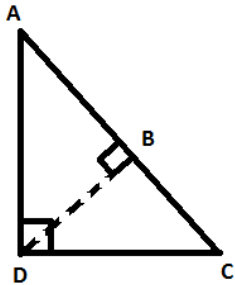
Geometry
 Unit 4
 Extra Credit

To be eligible to receive extra credit on the unit test you must have a score below 75. To receive extra credit you must score an 80% or higher on this assignment (anything lower results in no extra credit). If you earn extra credit is calculated in the following manner: $\text{Old Test Score} + (75 - \text{Old Test Score})(2/3) = \text{New Test Score}$. This assignment will not be accepted late for any reason other than missing the day of school it is due in which case it must be turned in the next day you are in school even if you do not have class.



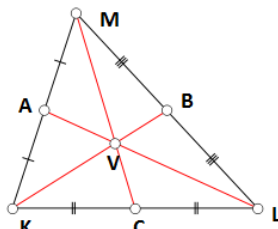
\overline{BE} is a midsegment

1) [4] $BE = x + 7$ and $CD = 3x + 9$, and $AE = 2x - 2$
 find AD



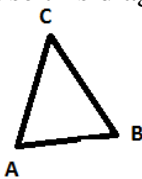
2) [5] If $AB = 2x - 2$, $BC = x - 4$, and $BD = x - 1$,
 Find DC

3) [3]



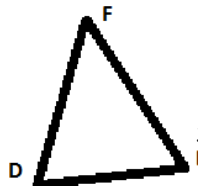
$BV = x^2 - x - 2$ and $KV = 4x + 4$. Find KB

Use this diagram for #4 and 5



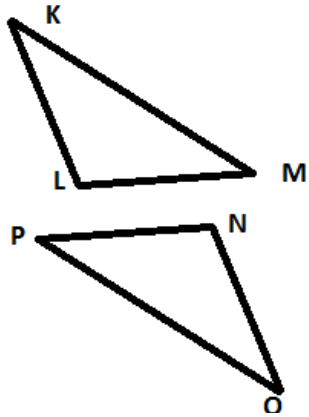
$\triangle ABC \sim \triangle DEF$ with a scale factor of 2:5

4) [3] If $m\angle A = 2x + 18$, $m\angle F = 6x - 16$, and $m\angle E = 3x + 2$
 Find $m\angle C$ and $m\angle B$



5) [4] If $AC = 2x$, $CB = 2x + 4$, and $DF = 4x + 7$, find FE.

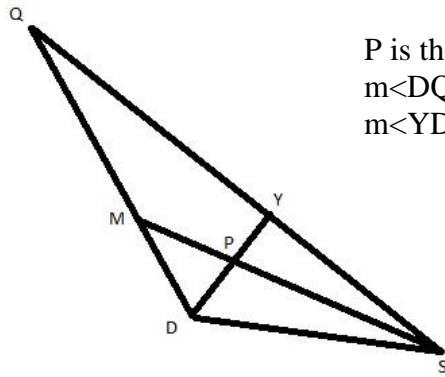
6) [3]



$$\triangle KLM \cong \triangle ONP$$

If the perimeter of $\triangle KLM = 73$, $PN = x$, $ON = 2x - 2$, and $OP = 3x - 3$, find KM

7) [4]

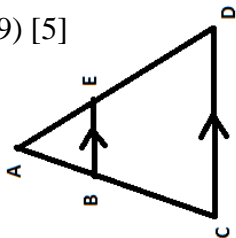


P is the incenter

$m\angle DQS = 4x - 6$, $m\angle QDY = 6x - 19$, and $m\angle YDS = 4x + 5$. Find $m\angle YSM$.

8) [4] The area of two similar figures is 72 and 242. The perimeter of the larger figure is represented by $10x + 16$ and the perimeter of the smaller figure is represented by $7x + 1$. Find the difference in their perimeters.

9) [5]



In the following diagram, $AE = x - 1$, $BE = 2x - 6$, $ED = x + 5$, $CD = 3x + 3$, and $BC = 3x - 1$. Find AB .