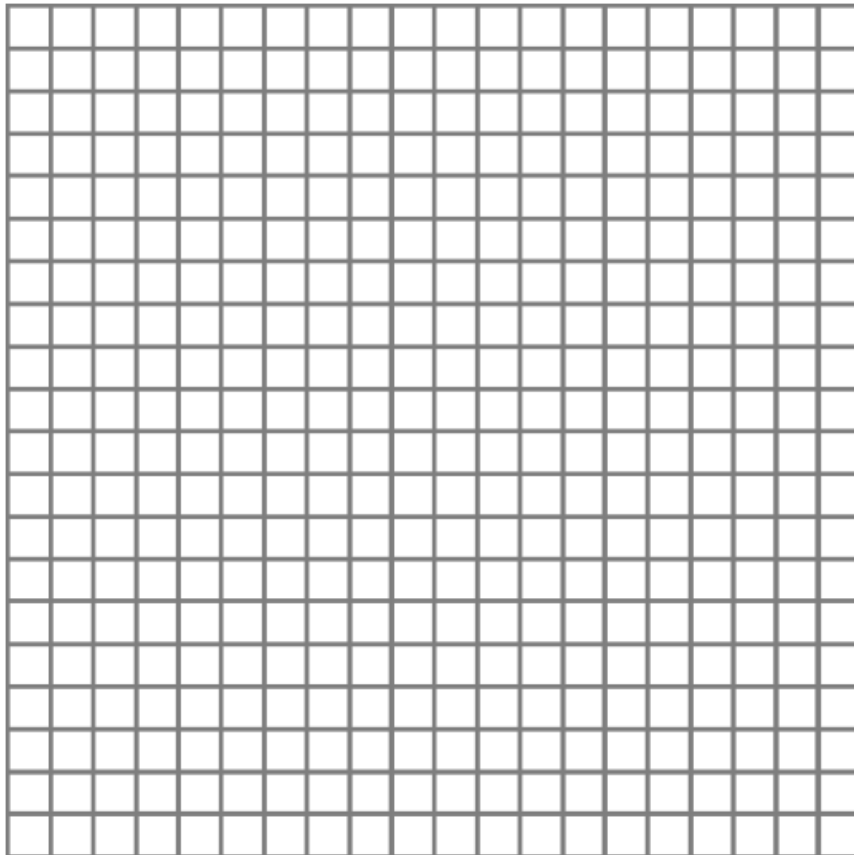


Monday, March 2, 2020

Bellwork:

Use the grid provided or a sticky grid or graph paper to draw out #19 on p. 80. Try to find the coordinates of the point that they are asking for, and explain how you did it.



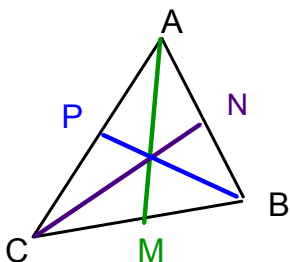
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2.1 Continued - Applications of Midpoint



1) Finding the Equation of a Median

median - a line that connects a vertex of a triangle to the midpoint of the opposite side.

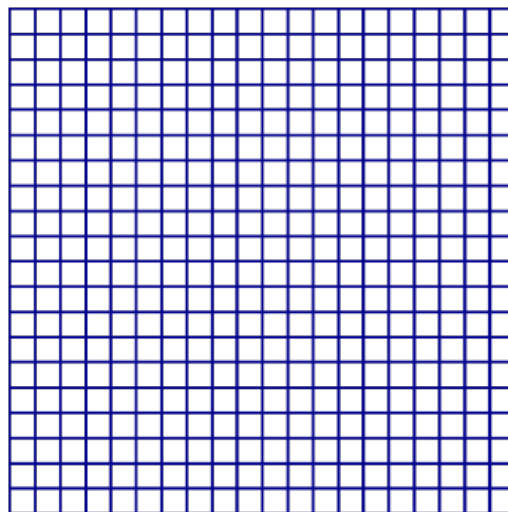


AM, BP, and CN are medians of triangle ABC.

Remember that you need slope and one point to find the equation of a line.

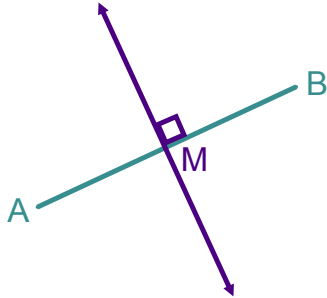
How can we find the equation of a median?

Example: DEF has vertices $D(-3, 2)$, $E(-1, 4)$, and $F(3, 0)$. Find the equation of the median that bisects DE.



2) Finding the Equation of a Perpendicular Bisector

perpendicular bisector - a line that passes through the midpoint of a line segment at a 90° angle.



How can we find the equation of a perpendicular bisector?

Example: $\triangle ABC$ has vertices $A(-1,3)$, $B(-3, 0)$, and $C(6, 1)$. Find the equation of the perpendicular bisector of side BC .

