KEY

Linear Measure classwork

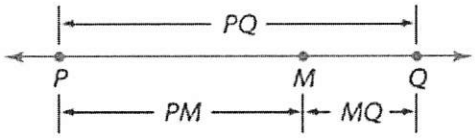
What is or is not above a pair of letters is meaningful in geometry!

Line $\overleftrightarrow{AB}$

Segment $\overline{AB}$

Measure AB (distance between points A & B)

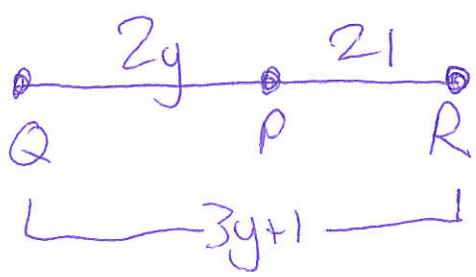
- **Betweenness**



Example: Point M is between points P & Q only if P, Q, and M are collinear.

Create an equation with the line segments above: $PM + MQ = PQ$

Ex #1: Find y and QP if P is between Q and R, $QP = 2y$, $QR = 3y + 1$, and $PR = 21$.



$2y + 21 = 3y + 1$

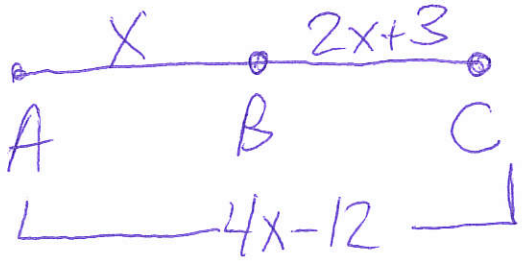
$-2y \quad -1 \quad -2y \quad -1$

$20 = y$

$QP = 2y$

$QP = 40$

Ex #2: Find x and BC if B is between A and C, $AC = 4x - 12$, $AB = x$, and $BC = 2x + 3$



$x + 2x + 3 = 4x - 12$

$3x + 3 = 4x - 12$

$-3x + 12 \quad -3x + 12$

$15 = x$

$BC = 2x + 3$

$BC = 2(15) + 3$

$BC = 33$