

Bell Ringer: Where Do You Meet?

Name: _____

Period: _____

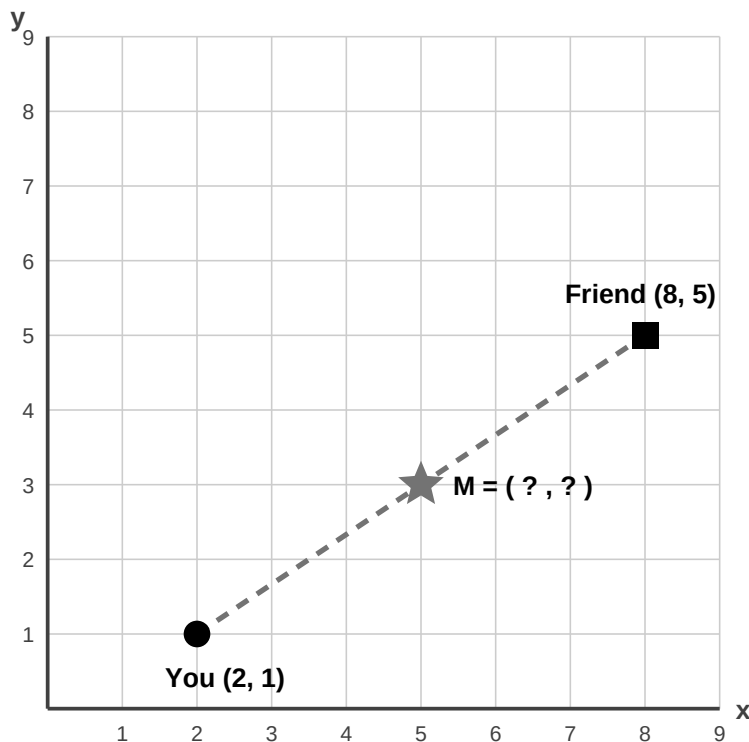
Date: _____

15 minutes

$$M = \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

Midpoint = the average of the x's and the average of the y's

You are at home. Your friend is at the library. You both start walking and meet exactly halfway. The midpoint formula finds the meeting spot.



Shape code

- first point (x1, y1)
- second point (x2, y2)
- ★ midpoint M = meeting spot

Dashed line = the walk

M sits exactly in the middle of the two points.

Remember:

Midpoint = ADD, then divide by 2.

(Distance = subtract. Do not mix them!)

1 | Label the two points

You = (_____ , _____)

Friend = (_____ , _____)

2 | Find the meeting point, one step on each line

Plug in: $M = \left(\frac{\quad + \quad}{2}, \frac{\quad + \quad}{2} \right)$

Add: $M = \left(\frac{\quad}{2}, \frac{\quad}{2} \right)$

Divide: $M = (\quad , \quad)$

★ Star challenge - a NEW walk, NEW numbers:

You start at A = (1, 2). The MIDDLE is M = (4, 6).

Find the END point. B = (_____ , _____)

