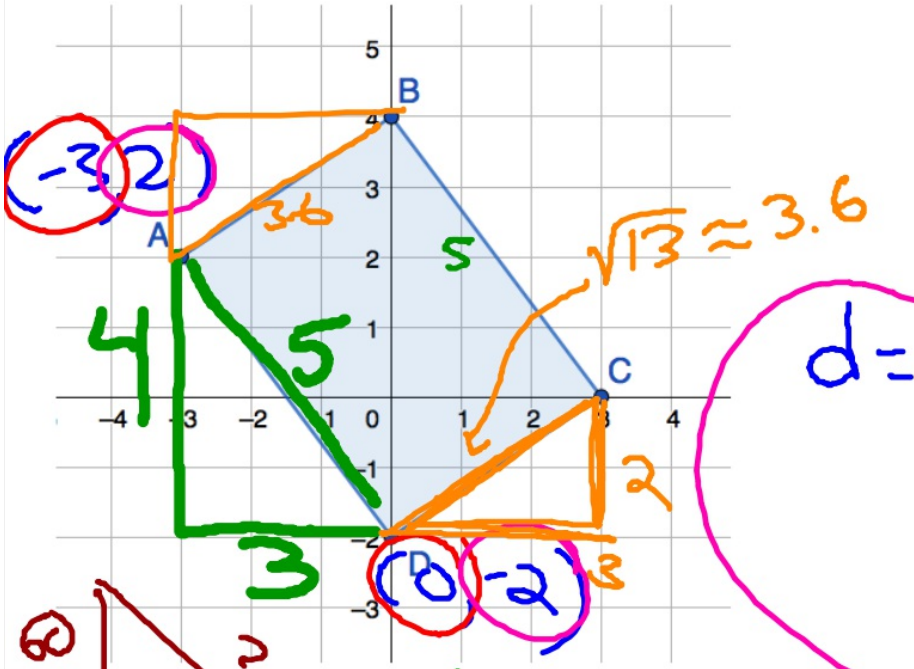
Good morning: attach warm up to notes, then find the perimeter of the parallelogram to the nearest tenth.



$\sqrt{13} \approx 3.6$

$a^2 + b^2 = c^2$

$4^2 + 3^2$

$16 + 9 = 25$

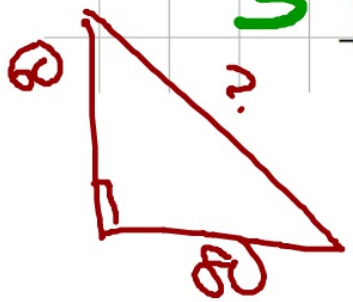
$\sqrt{25} = 5$

$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

$(-3 - 0)^2 + (2 - (-2))^2$

$(-3)^2 + (4)^2$

$\sqrt{9 + 16}$



$P = 17.2u$

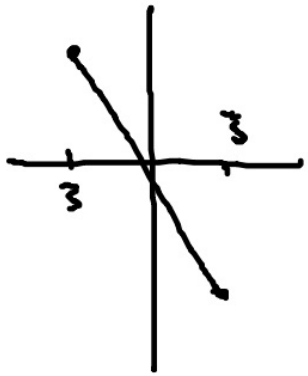
reminders:
retakes in DS today/friday
tutoring today 4-5p
next assess: Tuesday 9/4

What questions do you still have about finding distance on the coordinate plane?

Notes

Can you find the distance between (-3.4, 7.1) and (5.3, -8.5)?

$d^2 = \Delta x^2 + \Delta y^2$ — Distance formula



$(-3.4 - 5.3)^2 + (15.6)^2$

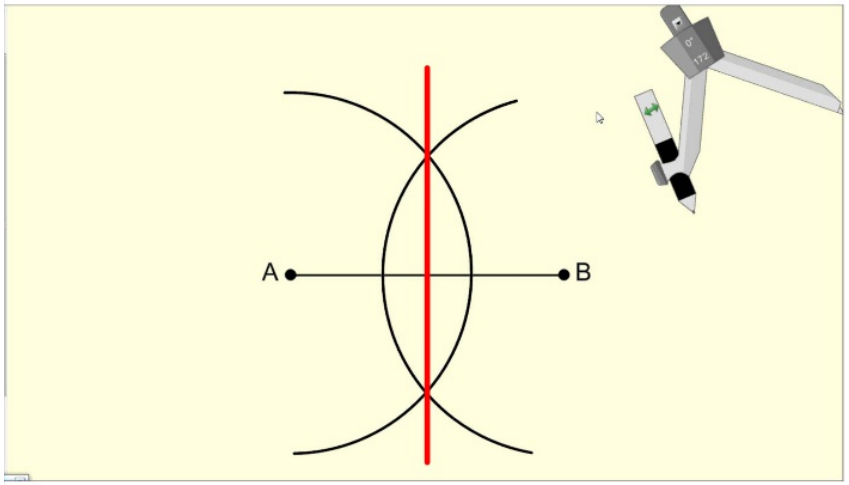
$(-8.7)^2 + 243.36 = 319.05$

75.69

$d^2 = 319.05$

$d = 17.86$ units

How do you find the middle of a segment?



???

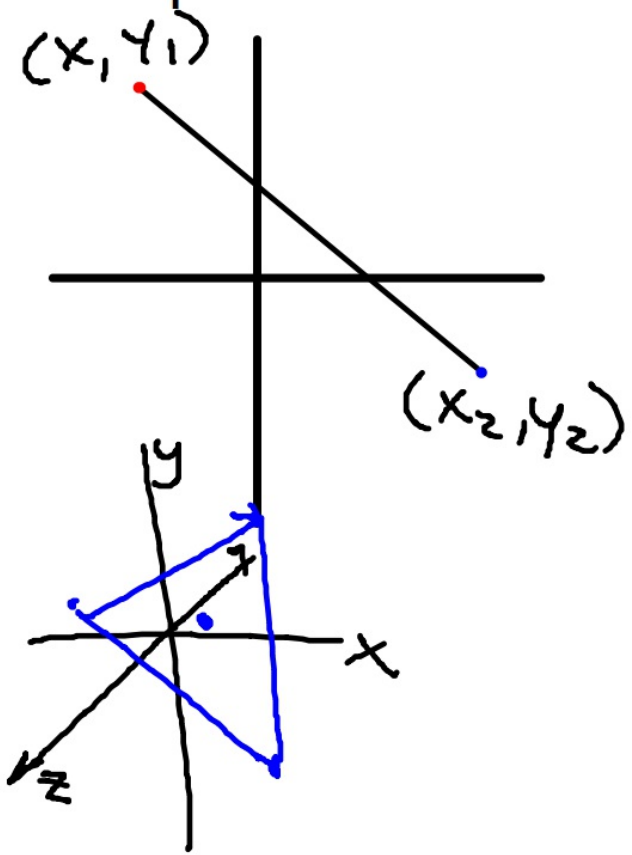
Euclidean Geometry

Cart

https://google.discoveryeducation.com/learn/techbook/units/a7fd97c9-3613-445e-8d9f-c8f20d44a2a1/concepts/2d4d389b-c9b7-46cf-86ef-89e6879a8091/tabs/19155618-5d23-4aa5-a4e5-017f733dab9a/pages/bf7a9b76-04d4-4af5-9097-32e001e55bba

Karate chop activity

Midpoint Formula



If A is located at (x_1,y_1) and B at (x_2,y_2), then the location of the midpoint M, is

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

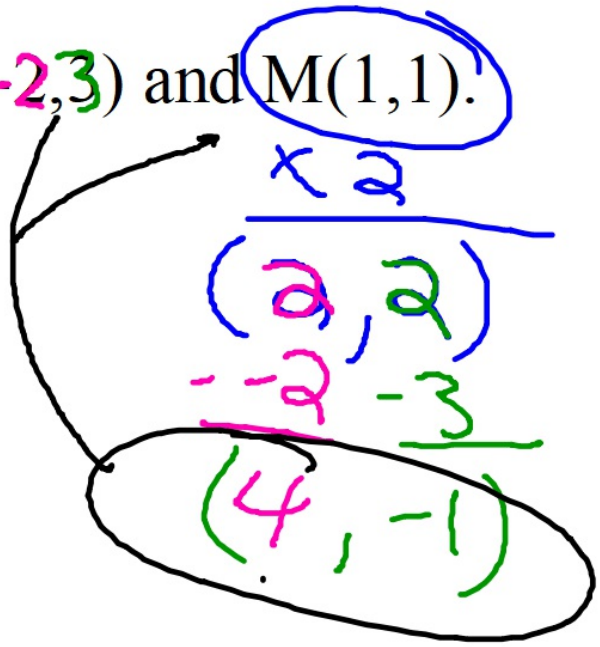
(Avg of x's, Avg of y's)

Find the midpoint of $\overline{BC}$ with B(-3,4) and C(2,8).

$$\left(\frac{-3+2}{2}, \frac{4+8}{2}\right) \rightarrow \left(-\frac{1}{2}, 6\right)$$

Suppose M is the midpoint of $\overline{AB}$, and A(-2,3) and M(1,1). Find the coordinates of B.

$$\left(\frac{-2+x}{2}, \frac{3+y}{2}\right) = (1,1)$$



Constructions Review

Previous learning targets:
I can construct an equilateral triangle and perpendicular bisector using a compass and straight edge.

1. Construct equilateral triangle ABC.
2. Construct the perpendicular bisector of $\overline{AB}$.
3. Construct the perpendicular bisector of $\overline{BC}$.
4. Mark the intersection of the bisectors as D.
5. Place the needle on D, pencil on A,B, or C. Make a circle.