

Good afternoon: no warm up today, assessments are being passed back
Record grades in your grade guide
Find a peer expert at your table for any you are not sure about

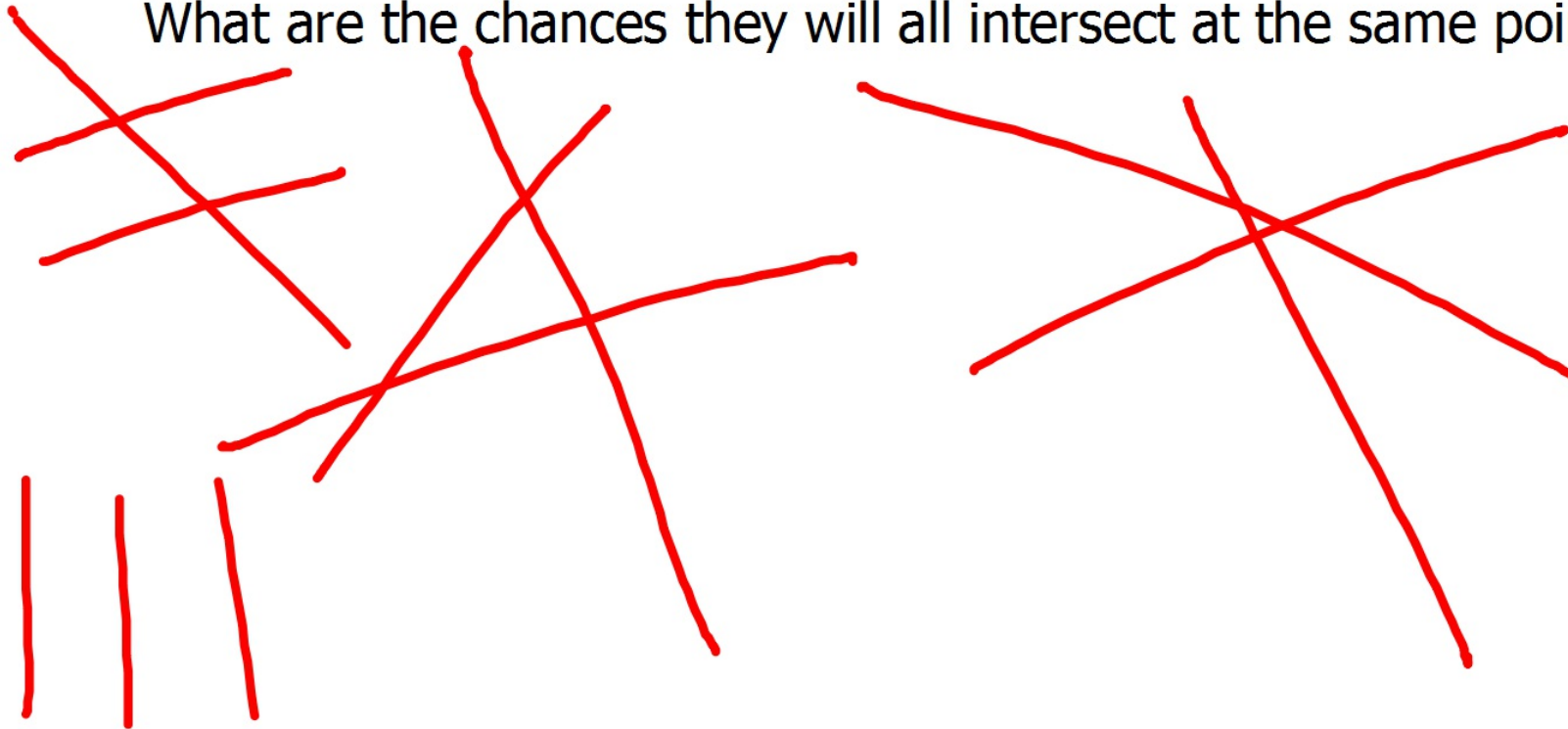
Reminders

- Tutoring today after school
- Reassess. available in DS Thursday only this wk
- Monday 11/21 is a B-day

Projects

Close your eyes and draw 3 lines.

What are the chances they will all intersect at the same point?





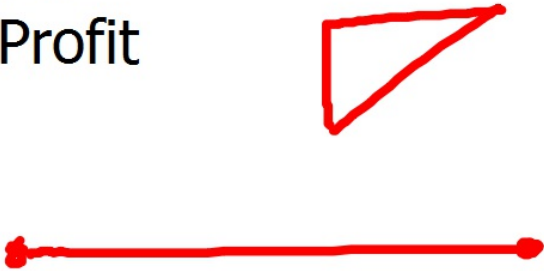
Close your eyes and draw 3 points.

What is the probability that they are collinear?



Centroids and Medians

1. Draw, then cut out large triangle from construction paper
2. Find the midpoint of each side
3. Use a straightedge and construct the 3 medians
4. Find the centroid
5. ???
6. Profit

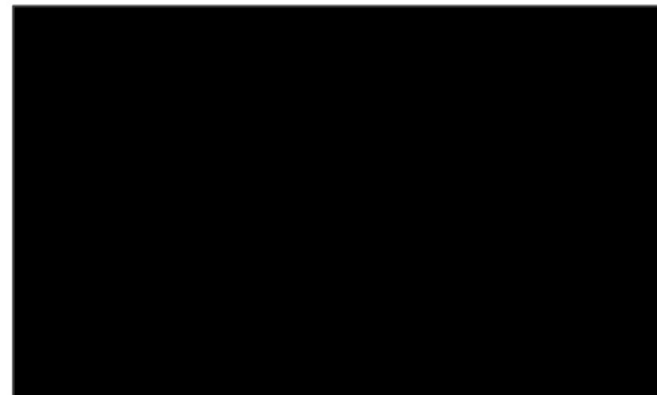


How to find the centroid on the Cartesian plane

Centroid Formula

$$\left(\frac{x_1+x_2+x_3}{3}, \frac{y_1+y_2+y_3}{3} \right)$$

<https://www.youtube.com/watch?v=ZwBg4d7Wx1s>



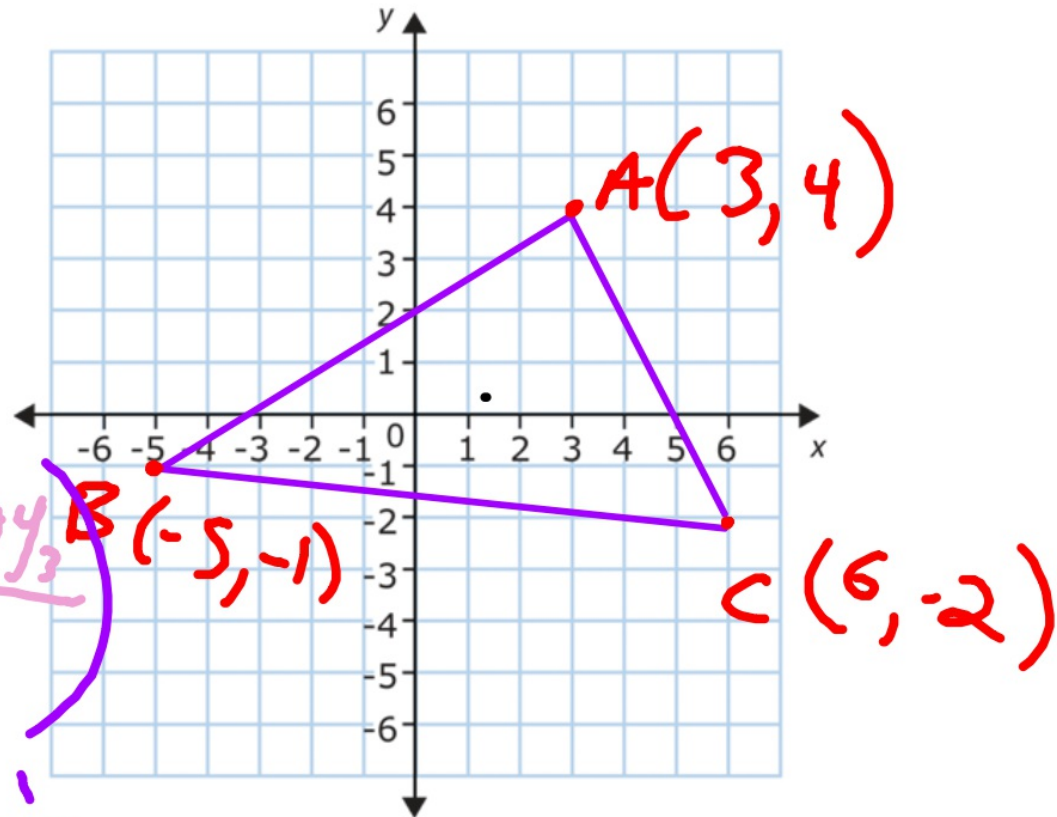
Find the centroid of the triangle whose vertices are
A(3,4) , B(-5, -1) , and C(6, -2)

Guess: (2,1)

Centroid
Formula

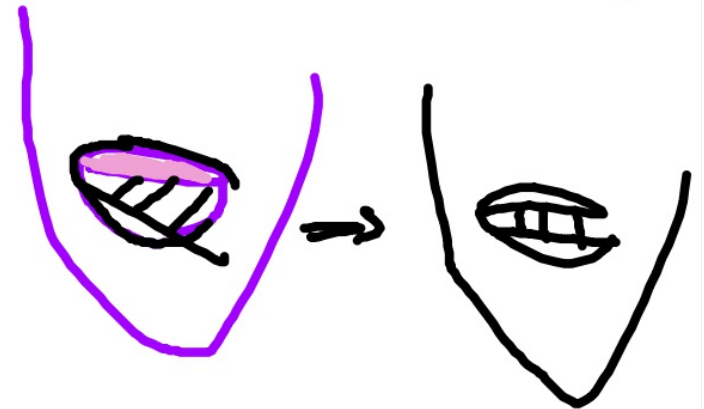
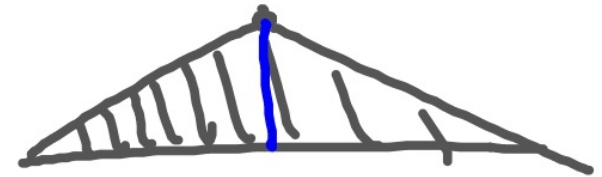
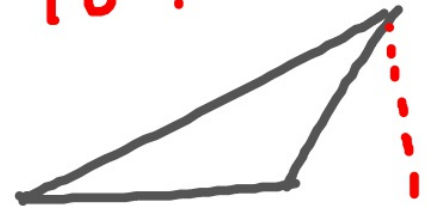
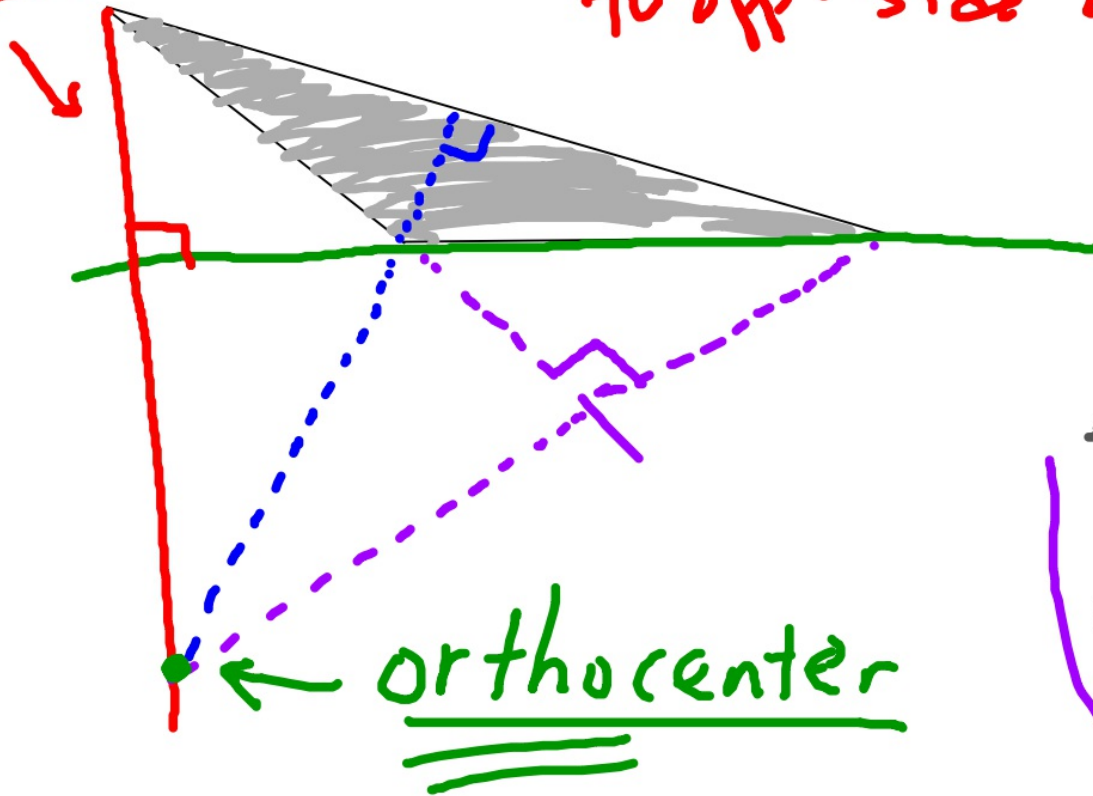
$$\left(\frac{x_1 + x_2 + x_3}{3}, \frac{y_1 + y_2 + y_3}{3} \right)$$

avg of x's avg. of y's



What is an "altitude"? (NOTES)

altitude: a segment from a vertex to opp. side at 90° .



Triangle Centers

- Circumcenter
- Incenter
- Centroid
- Orthocenter

Finding other centers on the Coordinate Plan

Remember perpendicular slope relationshi

If a line has a slope _____ then a perpendicular line has slop

Homework/Classwork

p. 202 #9, 13-16, 20, 21 [CO-C10b]

