

Math Circle --- Lines and Triangles

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1. Let's draw two lines and pick six points with three points on each line . Let's join the points as indicated, what can you observe?

2. Let's draw a triangle. Can you figure out its altitudes? What can you observe?

3. Again a triangle. How about its medians?

4. Draw a Triangle and cut the edges and put them together in a way as indicated. Can you guess what will happen? If skeptical, you could draw another triangle and do the experiment again :)

5. If we do the same experiment on a quadrilateral, can you guess the result? Also, can you see the possible connection between the two experiments?

6. Brain Storm: How many different kinds (shapes) of quadrilaterals can you come up with?

7. Brain Storm: You want to deliver a cake you just baked to a friend on a street and then go to school. Do you know what is the shortest path?