

Proximate Processes

When explaining certain processes, Alex likes to consider them relative to where he first started (using a metric). They aren't too far off, anyway.

"This is just a line intersecting two parallel lines, so there will be two intersections and therefore two answers."

"There are infinitely many possible coordinates, so you might as well stick to the good-old dot product in order to describe all of them. They all lie on a line, so it isn't that bad, is it?"

"Even though the diagram can make you think of similar triangles, this problem can be solved by using only two lines."

"You know the sum of two numbers and the sum of their squares... Now what?"

"As with problems similar to this one you want to find the slope with the two points given to you. The denominators of your answer will not look auspicious, but trust me, they are right."

"I bet you can find at least two possible answers on your own – you have done this at quite a few times already. Now, find another one that is not parallel to the one they give in the problem. Don't just find one parallel to the coordinate axes either!"

"I know paper-craft is hard, but at least draw them accurately based on the conditions, okay?"

"Hey, even though you might not have noticed, the four points in the problem form the vertices of a parallelogram no matter what the values of the four variables are! That should allow you to see another pair of segments with equal length!"

"The extra letters might a little bit scary, but this is because we are doing the general case here. Writing the given line equation in the standard form will be really helpful."

"Spoiler alert: this description does not give a unique triangle. To be exact, there should be three different triangles that satisfy this problem, although you only need to make one of them."

"Here you get to see some interesting peoples and a strange bird moving around along a line."

"The answers you get to the two questions should be directly opposite of each other. (Isn't that quite intuitive?)"

"This problem is a direct application of the previous one where you learned the basic vocabulary, so I am not gonna help you here."

"Yep, there are a lot of *italics* in this problem. Time to take some notes!"