## Talking Points

## TOPIC: talking about parallel lines, angles, & proof — what does your group think?

- Sometimes in Geometry, the diagram gives you information that is not contained in the written instructions.
- Sometimes in Geometry, the diagram is unhelpful to the proof.
- Dr. S would give us 100% for this round of Talking Points because we are actually doing three complete rounds on every single Talking Point.
- When a diagram is unhelpful, you can never add a parallel or perpendicular line by construction to make the diagram more helpful.
- 6. When you are trying to prove that two lines are parallel, you should go ahead and mark the lines as parallel on your diagram before you have finished your proof.
- 7. It's OK not to be precise while doing a two-column proof.
- 8. It is OK to construct an auxiliary line on the diagram for a proof.
- 9. If you have a transversal-across-two-lines situation and if the same-side interior angles are supplementary, then the two lines are parallel.
- 10. We now have five distinct ways of proving that two lines are parallel.
- 11. I can name all five methods.
- 12. I should be able to name all five methods.
- 13. There is at least a 99.999% chance that the ability to name all five methods correctly is going to be on the test this week.
- 14. The five methods are "corresponding angles," "alternate interior angles," "same-side-interior supplementary angles," "both lines perpendicular to a third line," and "Go, Giants."
- 15. I know what the missing fifth method is.
- 16. I am going to look up the missing fifth method as soon as this set of Talking Points is over.
- 17. I am going to be able to name all five methods by heart by tomorrow.
- 18. It's kind of cool that we know five methods of proving two lines parallel
- 19. "By construction" is an acceptable way to justify a construction step in a proof.
- 20. Sometimes the best auxiliary line to construct is a perpendicular line.

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A/D/U

Whenever a transversal crosses two parallel lines, their same-side interior angles will always be congruent.

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