Becoming Invisible, by Bob Kaplan and friends*

Students are used to following the teacher, and it's hard to change that dynamic. Here are some responses you might try...

Holding your cards close:

- I don't know, I'm just the secretary.
- What a good way to put it.
- Why does that work?
- What an interesting idea. Why?
- That's great, but are you really sure about that? Is 19 really less than 18?
- Sounds good, sounds right, it could work, but how could you convince a Martian or a skeptic?
- This may not work, but it might!
- That's a good point.
- That's a good thing you're doing.
- Ah!
- Hey, that's terrific.
- This is great thinking, by the way.
- Your question really clarifies things, thanks.
- I'm in complete doubt let's work it out.
- Oh, nice idea.
- Why? I'm sure you're right, I just don't see it.
- The numbers 12 and 24 are both in the same family, so they're both good guesses.
- You've found an economical way of thinking about it.
- You can guess take a risk and be wrong. Sometimes it's fun to be wrong.
- How were we thinking about it?



Thinking Prompts:

- What do you think is going on with this?
- Do you see what the previous speaker was saying?
- Can we make this simpler?
- Take a wild guess: 17? 3 1/2?
- What would a harder problem be?
- I have a terrible memory for these things, so I'm going to put them on the board.
- I'm bothered that this is an odd number.
- Wait, can I just check?
- Are these expressions the same? Anyone think no?
- I'm getting confused we have too many examples up here.
- That's an interesting discovery: you can't have both of these at once, can you?
- I'm not convinced....
- Wait, you're going too fast for me.
- What's a way to be systematic in exploring this?
- Exactly. Give us the argument again why?
- What stayed the same? What changed?
- Where did we start?
- What seems significant?
- How does this representation show our thinking?
- Can we generalize?
- How can we capture that thinking in writing?
- Can you come up and explain or walk through your thinking?
- Could we show it another way?

This article is part of the soon-to-be-released book, *Playing With Math: Stories from Math Circles, Homeschoolers, and Passionate Teachers*. You are welcome to share the contents of this article. You can also remix and tweak anything here as you wish, as long as you share your creations on the same terms. Please credit Bob Kaplan and playing withmath.org. More formally, we distribute this content under the Creative Commons Attribution-NonCommercial-ShareAlike license: CC BY-NC-SA

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