

What is this routine?

The Psychic Mathematicians routine is a classroom protocol for collaboratively analyzing student strategies. The teacher selects a piece of student work with a strategy, representation or tool they want the class to consider. They project the student work and ask the class to “read the mind” of the student mathematician who created it. A student volunteer explains what they think the student did and why it makes sense. The author of the strategy then confirms or adds on to the explanation.

How do I use this routine?

While students are working independently, the teacher selects a student strategy they would like the students to consider. When it is time to share, students gather on the carpet or at their desks.

- 1. Place the student work under the document camera and give students silent time to make sense of the strategy.**
Have partners turn and talk if needed. Key Question: What did the student do and why did it make sense?
- 2. Invite the students to be “psychic mathematicians.”** Give the class silent time to look at the student work, then ask for a volunteer to be the “psychic mathematician.” The student attempts to explain the steps of the strategy and why it makes sense. The teacher may invite other students to offer alternative explanations.
 - After the explanation is complete, ask the student whose work it is to confirm and/or add on to the volunteer’s explanation.
- 3. Repeat with another student strategy if desired.**

Why would I use this routine?

The Psychic Mathematicians routine is an equitable engagement strategy because it puts the responsibility on all the students to make sense of the student strategy being offered and it adds the hook that students are trying to “read their classmates minds”. The teacher choice of what student work to share places the knowledge of the mathematics in the hands of the student who is sharing. This routine also has the potential to disrupt status dynamics. When the teacher chooses a piece of work from a student who doesn’t normally share, she publicly confers math status on the student which can support development of a positive math identity.

When do I use this routine?

This routine can be used almost any time it is appropriate to share student strategies, but especially when you want students to make sense of a new or more efficient strategy.

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