The "Write" Way: Mathematics Journal Prompts for Grades 5–6

Barbara J. Dougherty

Sample Journal Prompts

Content Prompts

Number and Operations

Tasha said, "If I add two even numbers, I get a sum that is even." Twaina said, "If I add two odd numbers, I get a sum that is even." Do you agree with either of these girls? Justify why you agree with her.

They are both correct. Students should support their position with specific examples or a word description.

Sam said, "I ate one half of a pizza, which was three slices." Jena said, "I ate four slices of pizza, and it was one half of a pizza." Who is telling the truth? Prove it.

Both could be telling the truth. Sam's pizza could have been cut into six pieces while Jena's was cut into eight pieces.

Patterns and Algebra

Gina put this pattern on the board: 1, 3, 9, 27, 81, ... Dorina said, "I know her pattern. She is multiplying by 3 each time." Make another number pattern. Describe your pattern in words. These can be put on notecards and exchanged with other students. You may want to verify that students have used a consistent pattern.

Measurement

Find as many rectangles as you can that have an area of 36 square units. Draw them showing their dimensions. What do you notice?

Most students will show whole-number dimensions. They may note that the dimensions are factors of 36.

Geometry

Kea asked, "Can a right triangle have an obtuse angle?" Shea didn't know what to say. What would you tell Kea? Justify your response.

Students should indicate that an obtuse angle is not possible because an obtuse angle measures more than ninety degrees. That would make the total sum of the angles of a triangle more than 180°. They should justify their claim with drawings or a logical explanation.

Data Analysis and Probability

The graph I think I know the most about is the _____ graph because . . . Show a sketch of your graph.

Answers will vary. The sketch should match the name of the graph given. Students' responses will help you determine what knowledge students have of graphs and graphing. This prompt can be used as the introductory prompt before students start studying graphs. **Process Prompts**

When I add four- or five-digit numbers, I . . . Describe how you add large numbers.

Students' methods may describe regrouping techniques or estimation strategies to predict the number of digits in the sum.

Affective/Attitudinal Prompts

Write a letter to your best friend describing what happens in our math class.

To order, please contact: Curriculum Research & Development Group University of Hawai'i 1776 University Ave. Honolulu, HI 96826 800-799-8111 crdg@hawaii.edu