Situation 11: Faces of a solid

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Prompt

Observing a seventh grade class, where the lesson was on classification of solids, the teacher held up a rectangular prism and asked the class how many "sides" there were. Two students responded, one with an answer of 12, the other with an answer of 6. The student with the answer of 6 was told his answer was correct and the lesson moved on. After the lesson was over, the student who gave the answer of 12 was asked were he had gotten his answer. He indicated he was considering the edges as the 'sides' or the solid.   This was understandable misconception because the edges of polygons are sometimes called 'sides.' In fact the term 'sides' is ambiguous here.   Perhaps if the teacher had used the more correct term of 'faces,' the teacher confused at least one student because of mathematical language.

Commentary

Mathematical Foci

Mathematical Focus 1

Mathematical Focus 2

Mathematical Focus 3