MIDDLE SCHOOL QUESTIONING VIGNETTE

TEACHER - So do we all understand how to find the area of a trapezoid?

*Silence, some nodding, some looking around.*

TEACHER - JaVaughn, are you good? Any questions?

JAVAUGHN – Wait, what? Oh, um, no.

TEACHER - Lucia?

LUCIA– Well, I guess I could use another example.

TEACHER - Okay, let’s try another one! Ethan, draw a trapezoid on the board and label its side lengths.

ETHAN – Anything? (*Teacher nods, Ethan draws a parallelogram with side lengths of 4 and 7, but does not give a height.)*

TEACHER – No, that’s not a trapezoid.

ETHAN – Well, you said anything.

TEACHER– Samantha, can you give us one?

SAMANTHA – (*Samantha goes to the board and draws a traditional trapezoid with a* ***slant*** *height of 4 and bases of 6 and 12.)*

TEACHER – You meant to label the height 4, not this side. (*Teacher corrects the drawing.)* Okay, well, first what do we do? We use our formula, right? What is the formula?

LUCIA- Something like b one plus b two times h and then all over 2.

TEACHER – Well, I guess that would work, but we usually write it like this, one half b one plus b two times h. *(Teacher writes the expression*  $\frac{1}{2}\left(b\_{1}+b\_{2}\right)h$ *on the board.)*

TEACHER –So, what we do next. What numbers do we put in the formula?

(*pause, no responses)*

SAMANTHA (*finally says the answer without being called on)*– Put the 6 in for b one, the 12 in for b two and the 4 in for h, then type it into your calculator and you get 36.

TEACHER – Does everyone agree? (*pause)* Does anyone disagree? (*pause, some shake heads)* Okay, so our solution is 36 something, we could use inches squared, I suppose. Okay, that should take care of any problems, right? Do problems 7-27 odd on page 432.

(*pause)*

TEACHER - Wait, note that #7 and 9 are sideways, so you just have to do turn the book over and then do it the same way. Oh and 23, 25, and 27 are a little different because the sides come in differently. We talked about those yesterday, but just skip them and we will do them together tomorrow.