**Unit: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Topic: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Course: \_\_\_\_\_\_ Date: \_\_/\_\_/\_\_\_\_**

**Standards: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Source: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| --- | --- | --- | --- |
|  | Statement(s) | | Question(s) |
| Setting up the Problem | Ask a student to read the problem. | |  |
|  |  |  |  |
|  | Anticipated Strategies/Misconceptions | Who | Questions |
| Monitoring Student Work | Make a table:   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Patio | 1 | 2 | 3 | 4 | 5 | | Tiles | 8 | 10 | 12 | 14 | 16 |   2x + 6 |  | -What is the meaning of the x?  -What patterns are you noticing in your table?  -What type of functions does this represent?  -Is there a way to find how many tiles there would be in patio 0? |
| Area:  3(X+2) - X |  | -What does the 3 represent?  -Why are you subtracting x?  -What does the x represent? |
| 2X + 6  X: tiles in middle  \*2: tiles on top and bottom  6: end tiles |  | -What does the 2x represent?  -What does the 6 represent? |
| 2(x+2) + 2   |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  | -What does the 2 represent?  -What does the 2(x+2) represent in the context of the problem? |
| Misconceptions |  | -Counting all of the tiles (including the middle) |
| Non starters |  | -What do you know about the problem?  -What question are we trying to answer?  -Can you draw a picture?  -Might a table help you get started? What are our variables? |
|  |  |  |  |
|  | Parts of Discussion | Questions/Statements | |
| Managing the Discussion | Launching the Discussion | What was unclear about the problem?  What did you do first when working on the problem? | |
| Eliciting Student Strategies | Joe, would you be willing to start us off?  Can you repeat that?  Can you explain how you got your answer?  Walk us through your steps. | |
| Focusing on Mathematical Ideas | Can you explain why your equation matches the data?  How is Joe’s method similar to Sue’s method?  How is Sue’s equation similar to Tom’s? Are they equivalent? How can we tell? | |
| Encouraging Interactions | What do others think?  Do you agree or disagree with Amy’s strategy?  Would someone be willing to repeat what Tom just said?  Allison, will you add to what Tom just said? | |
| Concluding the Discussion | Tomorrow we will continue our exploration of linear patterns beginning with the tiling pattern from today. | |
| Post Lesson Notes |  | | |