**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. |  |
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|  | Anticipated Strategies/Misconceptions | Who | Questions |
| Monitoring Student Work | Make a table:

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| --- | --- | --- | --- | --- | --- |
| 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 + 6X: tiles in middle\*2: tiles on top and bottom6: end tiles |  | -What does the 2x represent?-What does the 6 represent? |
| 2(x+2) + 2

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 |  | -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 |  |