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Weekly HW 1
Show your work for each of the following problems.
This Homework is due on or before FRIDAY.

| M: | Draw three different quadrilaterals, each with an area of 12 square units. | Which shape has a larger area: a rectangle that is 7 inches by $3 / 4$ inch, or a square with side length of 2 $1 / 2$ inches? Show your reasoning. |
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| T: | The diagonal of a rectangle is shown. <br> a. Decompose the rectangle along the diagonal, and <br> b. How does the area of this new shape compare to the area of the original rectangle? Explain how you know. | The area of a rectangular playground is 78 square meters. If the length of the playground is 13 meters, what is its width? |
| W: | Find the area of each shaded region. Show or explain your reasoning. | A homeowner is deciding on the size of tiles to use to fully tile a rectangular wall in her bathroom that is 80 inches by 40 inches. The tiles are squares and come in three side lengths: 8 inches, 4 inches, and 2 inches. State if you agree with the following statement about the tiles. Explain your reasoning. <br> Regardless of the size she chooses, she will need the same number of tiles. |
| Th: | Select all of the parallelograms. For each figure that is not selected, explain how you know it is not a parallelogram. | Find the area of the parallelogram |

