2.0A Red and Blue Tiles

Task

Lin wants to put some red and blue tiles on a wall for decoration. She is thinking about several different patterns of tiles she could create. She wants to choose a pattern that would let her use exactly as many red tiles as blue tiles.

a. Is it possible to create the pattern below using the same number of red tiles as blue tiles? Explain.

b. Is it possible to create the pattern below using the same number of red tiles as blue tiles? Explain.

c. Can you figure out how many tiles are in the pattern below without counting them one by one? Is it possible to create this pattern using the same number of red tiles as blue tiles? Explain.
d. Of the patterns above, which ones have an even number of tiles? Which ones have an odd number of tiles? If Lin wants to use an equal number of red tiles and blue tiles, should she use a pattern with an even number of tiles, or one with an odd number of tiles? Explain.