Activity Set 1.2 #3 and 5
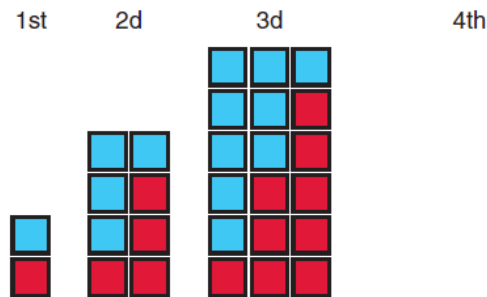
Understanding	Accuracy	Communication	Presentation	Total
2	a) 2 b) 2 c) 2	2	2	12

3. *Math Concepts:*

a. Use color tiles to build and then sketch the next two figures of this tile sequence. Record the number of tiles in each tile figure and the sum each figure represents to continue the number sequence.

1st	2d	3d	4th	5th
1	4	9		
1	1 + 3	1 + 3 + 5	_____	_____
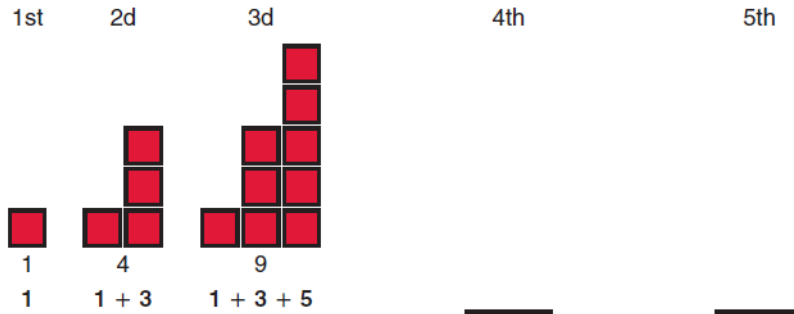
b. By duplicating each of the figures in part a and inverting the duplicate copy, rectangles are formed. Build and sketch the 4th figure in the sequence of rectangles. Explain how you can use the 4th rectangular array in the tile sequence to find the sum of the odd numbers 1 + 3 + 5 + 7 without just adding.
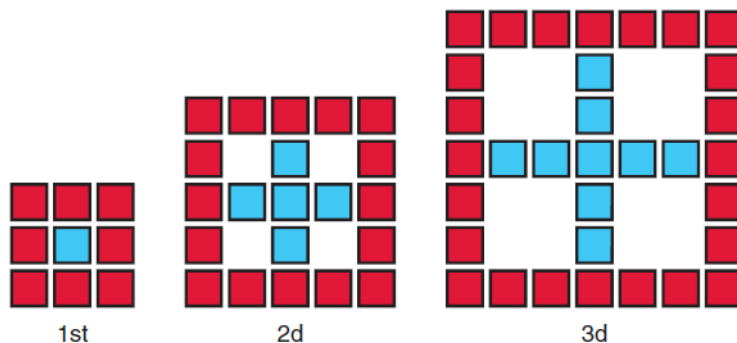

1st   2d   3d   4th

c. Explain how you can use rectangular arrays to obtain the sum of the odd numbers from 1 to 191 without just adding 1 + 3 + 5 + 7 + 9 + . . . + 191.

Activity Set 1.2 #5

Understanding	Accuracy	Communication	Presentation	Total
2	a) – e) 10	2	2	16

5.

Math Concepts: Here are the first three figures in a color tile sequence.

| 1st | 2d | 3d |

a. Write directions for constructing the eighth figure of this color tile sequence so that some-one who has not seen any of the figures could build the figure by following your directions.

b. What are the first eight terms in the number sequence represented by the total number of tiles in each of the first eight figures in the above color tile sequence?

c. Determine the total number of tiles in the 15th figure. How many tiles are red? How many tiles are blue?

d. Write a procedure using words or an algebraic expression to determine the number of red tiles for any figure, *n*. Write a procedure using words or an algebraic expression to determine the number of blue tiles for any figure, *n*.

e. Write a procedure using words or an algebraic expression to determine the total number of tiles for any figure, *n*.