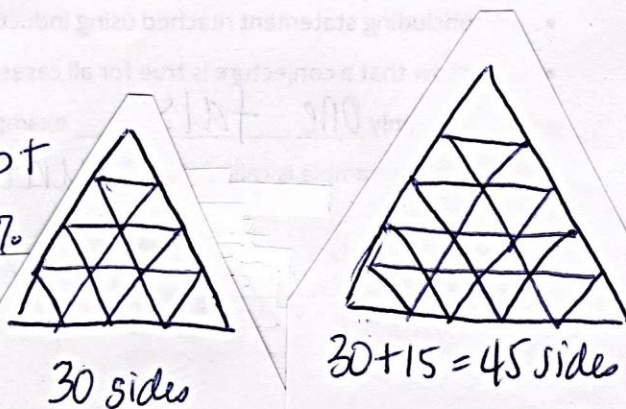
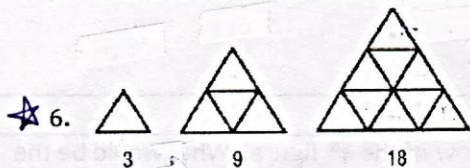


2-1 Practice Worksheet

1-6: Determine the next 2 terms in the pattern.

- 5, 8, 11, 14, 17, ...
 add 3 20, 23
- 6, 1, -4, -9, -14, ...
 subt. 5 -19, -24
- 2, 4, 8, 16, 32, ...
 multiply by 2 64, 128


- Club meetings: January, March, May, ... *July, Sept*
- Percent humidity: 100%, 93%, 86%
 subt. 7 79%, 72%



7-9: Make a conjecture about each statement. List or draw some examples that support your conjecture.

- The sum of two odd numbers
 - List examples. $1+3=4$, $3+5=8$, $5+7=12$, $7+9=16$
 - Make a conjecture. *The sum of 2 odd numbers is an even #.*
- The sum of an odd and even number
 - List examples. $1+2=3$, $2+3=5$, $3+4=7$, $4+5=9$
 - Make a conjecture. *The sum of an odd and even # is an odd #*
- The sum of the squares of two consecutive natural numbers.
 - List examples. $1+2=3$ $2+3=5$ $3+4=7$ $4+5=9$
 - Make a conjecture. *The sum of 2 consecutive natural numbers is an odd #*

10-14: Determine whether each conjecture is true or false. Give a counterexample for any false conjecture.

- If n is a prime number, then $n+1$ is not prime.
 $1+1=2$ $5+1=6$ False, 6 is not a prime #!
- If x is an integer, then $-x$ is positive.
 -2 is an integer $-(-2)=+2$; 2 is an integer $-2=-2$ False, it's neg
- If the area of a rectangle is 20 square meters, then the length is 10 meters and the width is 2 meters.
 $10 \times 2 = 20$ 30×1 False; it could be 30×1
- If n is a real number, then $n^2 > n$.
 $2^2 > 2$ $0^2 > 0$ False or $1^2 > 1$
-  The next figure in the sequence is an octagon.
 False, it should be a hexagon, which has 6 sides!