

DO NOW

1) A new radio costs \$390. Its value depreciates by \$40 per year. Find an explicit formula for its value after n years. What is the value after 8 years?

2) A new gardening system costs \$389.95. Its value depreciates by \$42.50 a year.

a) Use a recursive formula to find its value after 4 years.

b) Use an explicit formula to find its value after 9 years.

HW Questions???
HW p. 705 # 78, 80-82

Name: _____

Block _____

"What do you know about sequences and series so far...?"

1. The two formulas ways of expressing an arithmetic sequence are:
2. For $t_{10} = 23$, what does the t , digits 10 and 23 represent?
3. What is the Greek letter that represents a series?
4. Which represents the term before t_n ?
 - a) $t(n-1)$
 - b) t_{n+1}
 - c) t^{n-1}
 - d) $t_n - 1$
 - e) t_{n-1}
5. A recursive sequence needs two parts, the _____ and _____. Why?
6. If $t_n = 2n - 3$, find
 - a) t_{10}
 - b) The first term.
 - c) The position that that term 197 falls. (That is if $t_n = 197$ then what is n ?)

7. List the next 5 terms for $t_n = 1 + 2 \cdot t_{n-1}$
 $t_1 = 3$

8. List the next 5 terms for $t_n = t_{n-1} + n$, (Careful!)
 $t_1 = -1$

9. Evaluate $\sum_{k=1}^5 (k^2 - 2k)$

10. Christian gets better and better at his Dungeons and Dragons game every time he plays. He scores 20 points the first game, 25 points the second game, 30 in the third, and so on...

a. How many points will he score in his 15th game?

b. Napoleon is the reigning D&D champion, and he only accepts challengers who score 100 points per game or higher. Based on Christian's game 15 score, will Nap accept Christian's challenge?

QUIZ next class
Recommended Quiz Review:
p 750 #1-18 odd (answers in back of book)
p 975- #1-18