

What to turn in for collaborative problems:

Put the name, part, and page number at the top of each sheet, e.g. Jo Smith, working notes, page 1 of 6.

At the top of the first page of the final draft, also put:

Section and problem number:

Presented by:

Final Draft:

1 Draft:

Working notes:

Be sure to include an extension of the problem and some attempts (or success!) at solving it. This should be included on a separate page at the end of the final draft.

For the final draft especially, use only one side of the paper so it can be scanned easily.

Please staple each part separately, and paper clip the whole thing together.

closed = $T_m = \frac{m(m+1)}{2}$ m starts at 1

recursive = $f_1 = 1$; $f_n = f_{n-1} + n$ n starts at 2

1, 3, 6, 10, 15, 21, 28, 36

Assump

$$T_{n-1} = \frac{(n-1)[(n-1)+1]}{2} = \frac{n^2 - n}{2}$$

Know $\rightarrow T_n = T_{n-1} + n$

$$\frac{n^2 + n}{2} = \frac{n^2 - n}{2} + \frac{2n}{2}$$

$$\frac{n^2 + n}{2} = \frac{n^2 + n}{2} \quad \checkmark$$

Prove

$$T_n = \frac{n(n+1)}{2}$$