

Quiz: HSF.IF.A.3

1. Look at the sequence.

1, 3, 6, 10, ...

Which functions define this sequence explicitly?

Select all that apply.

A. $f(n) = \frac{n(n+1)}{2}$

B. $f(n) = 0.5(n^2 + n)$

C. $f(n) = \frac{n^2}{2} + \frac{n}{2}$

D. $f(n) = n + f(n-1), f(1) = 1, n \geq 2$

E. $f(n) = 2n - 1$

2. Look at the sequence.

5, 15, 45, 135, ...

What function defines this sequence explicitly in terms of n ?

Write the answer in the space provided.

3. Look at the sequence.

3, 6, 12, 24, ...

Complete the recursive definition of the sequence.

$f(n) = \underline{\hspace{1cm}} \cdot f(n-1), f(1) = \underline{\hspace{1cm}}, n \geq \underline{\hspace{1cm}}$

Write the answers in the spaces provided.

