# Warm up (on your own)

Given the following sequence, write down as much information as you can.

$$3, 1.7, 0.4, ...$$

Things you could think about...

- What type of sequence is it?

- What is the common difference or ratio?

- What is the recursive rule?

- What is the 10th term?

- What else can you think of?

3, 1.7, 0.4, ...

$u_1 = 3$

$u_n = u_{(n-1)} + (-1.3)$     $n \geq 2$

$U_4 = U_{(4-1)} + (-1.3) = U_3 + (-1.3)$

## What does this mean??

3        1.7        0.4  . . .

1st        2nd        3rd

$U_1$        $U_2$        $U_3$

3, 1.7, 0.4, ...

$u_1 = 3$

$u_n = u_{(n-1)} + (-1.3)$   $n \geq 2$

## What about this??

Given the arithmetic sequence with $U_1 = 8$
AND $U_6 = 28$

Write the recursive rule for this sequence

$U_1 = 8$

$U_n = U_{n-1} + 4$

$n \geq 2$

8    12    16    20    24    28

$+20$

$\dfrac{20}{5} = 4$

$\dfrac{28-8}{6-1} = \dfrac{20}{5}$

$= 4$

# Now you try....

# Unit 1: Sequences and Series Assignment 1

Corrections (because your teacher clearly loses her brain while typing...

#1 Should say $u_n = u_{n-1} - 1$
#2 Should be $u_n = u_{n-1} \times 7$
#10 Sould start at $u_1$ NOT $u_0$