

-3, -1, 1, 3, 5, ...

$a_{20} = 2(20) - 5$
 $a_{20} = 35$

<u>recursive</u>	<u>explicit</u>
$a_1 = -3$	$a_n = a_1 + d(n-1)$
$a_n = a_{n-1} + 2$	$a_n = -3 + 2(n-1)$
	$a_n = -3 + 2n - 2$
	$a_n = 2n - 5$

Welcome!

- 1) Please turn in your project to blue folder on my desk
- 2) Please take out a clean sheet of paper and pencil
- 3) YOU are awesome!
- 4) Complete at least 3 Stations TODAY
- 4) Homework: Pages 14-15 evens (due Wed.)

-27, -30, -33, -36, -39, ...

<u>recursive</u>	<u>explicit</u>	<u>21st term</u>
$a_1 = -27$	$a_n = -27 - 3(n-1)$	$a_{21} = -3(21) - 27$
$a_n = a_{n-1} - 3$	$a_n = -27 - 3n + 3$	$a_{21} = -63 - 27$
	$a_n = -3n - 24$	$a_{21} = -87$

17, 21, 25, 29, 33, ...

<u>recursive</u>	<u>explicit</u>	<u>17th term</u>
$a_1 = 17$	$a_n = 17 + 4(n-1)$	$a_{17} = 4(17) + 13$
$a_n = a_{n-1} + 4$	$a_n = 17 + 4n - 4$	$a_{17} = 81$
	$a_n = 4n + 13$	

-10, -14, -18, -22, ...

<u>recursive</u>	<u>explicit</u>	<u>X Y</u>
$a_1 = -10$	$a_n = -10 - 4(n-1)$	$\begin{array}{r l} 1 & -10 \\ 2 & -14 \\ 3 & -18 \\ \hline & a_{19} = \end{array}$
$a_n = a_{n-1} - 4$	$a_n = -10 - 4n + 4$	$a_{19} = -4(19) - 6$
	$a_n = -4n - 6$	$a_{19} = -76 - 6$
		$a_{19} = -82$

Find the 4 arithmetic means between -2 + 13.

-2, 1, 4, 7, 10, 13

(1, -2) (6, 13)

$$m = \frac{13 - (-2)}{6 - 1} = \frac{15}{5} = 3$$

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$$\text{If } a_3 = 7 + a_8 = 17$$

Find:

$$a_1 = 3$$

$$a_2 = 5$$

$$a_3 = 7$$

$$a_4 = 9$$

$$a_5 = 11$$

$$a_6 = 13$$

$$a_7 = 15$$

$$a_8 = 17$$

$$m = \frac{17-7}{8-3} = \frac{10}{5} = 2$$

Homework
Pg 26 (all)