

Name: _____

Date: _____

Arithmetic Sequences

Explicit and Recursive Notation:

Explicit: $a_n = a_1 + d(n-1)$ Recursive: $a_n = a_{n-1} + d; a_1 = \underline{\hspace{2cm}}$

If you look at both equations, they both rely on _____ and _____. We need to find those, then plug them in to the other equation.

Convert from explicit to recursive:

$$a_n = 3n + 8$$

$$d =$$

$$a_1 =$$

Convert from recursive to explicit

$$a_n = a_{n-1} - 3; a_1 = 5$$

$$d =$$

$$a_1 =$$

You try:

a) $a_n = a_{n-1} + 6; a_1 = -2$

b) $a_n = 8n - 5$

c) $a_n = -7n - 5$

d) $a_n = a_{n-1} - 1; a_1 = 13$
