

Name : _____

Recursive Formula

Part A

Write the geometric sequence using recursive formula.

1) $a_n = a_{n-1} \cdot \frac{1}{4}$; $a_1 = 2$

2) $a_n = a_{n-1} \cdot 4$; $a_1 = 0.4$

3) $a_n = a_{n-1} \cdot 2$; $a_1 = -4$

5) $a_n = a_{n-1} \cdot -6$;

Write the recursive formula for the sequence.

7) 10, -9, 8.1, -7.29, ...

9) $\sqrt{7}, \frac{\sqrt{7}}{3}, \frac{\sqrt{7}}{9}, \frac{\sqrt{7}}{27}, \frac{\sqrt{7}}{81}, \dots$

10) -35, -140, -560, -2240, -8960, ...

PREVIEW

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Recursive FormulaPart A

Write the geometric sequence using recursive formula.

1) $a_n = a_{n-1} \cdot \frac{1}{4}$; $a_1 = 2$

2, $\frac{1}{2}$, $\frac{1}{8}$, $\frac{1}{32}$, ...

2) $a_n = a_{n-1} \cdot 4$; $a_1 = 0.4$

0.4, 1.6, 6.4, 25.6, ...

3) $a_n = a_{n-1} \cdot 2$; $a_1 = -4$

3, 6,**PREVIEW**

$a_1 = -4$

484, -5324, ...

5) $a_n = a_{n-1} \cdot -6$;

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$a_1 = 13$

-21, 126,

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325, -1625, ...

Write the recursive formula for the sequence.

7) 10, -9, 8.1, -7.29, ...

$a_n = a_{n-1} \cdot -0.9$

-405, ...

$a_n = a_{n-1} \cdot -3$

9) $\sqrt{7}, \frac{\sqrt{7}}{3}, \frac{\sqrt{7}}{9}, \frac{\sqrt{7}}{27}, \frac{\sqrt{7}}{81}, \dots$

$a_n = a_{n-1} \cdot \frac{1}{3}$

10) -35, -140, -560, -2240, -8960, ...

$a_n = a_{n-1} \cdot 4$