

DESCRIBING SEQUENCES PPT'S

Describe, in words, the rule for continuing each of the following sequences.

- (i) 1, $+7$, 8, $+7$, 15, $+7$, 22,
 Rule: **add 7 to the previous number**
- (ii) 4, $\times 3$, 12, $\times 3$, 36, $\times 3$, 108,
 Rule: **Multiply the previous number by 3**

Describe, in words, the rule for continuing each of the following sequences.

- (i) 1, 8, 15, 22,
 Rule: ~~add 7 to the previous number~~
- (ii) 4, 12, 36, 108,
 Rule: ~~Multiply the previous number by 3~~

Describe in words the rule for continuing each of the following sequences.

- (i) 1, $+3$, 4, $+3$, 7, 10,
 Rule: **add 3 to the previous number**
- (ii) 64, 32, 16, 8,
 Rule: **half the previous number**

Describe in words the rule for continuing each of the following sequences.

- (a) 50, -5 , 45, -5 , 40, -5 , 35,
 Rule: **Subtract 5 from the previous number**
- (b) 2, $\times 3$, 6, $\times 3$, 18, $\times 3$, 54,
 Rule: **Multiply the previous number by 3.**

Describe, in words, the rule for continuing each of the following sequences.

- (i) 36, -5 , 31, 26, 21,
 Rule: **subtract 5 from the previous number**
- (ii) 3, $\times 3$, 9, $\times 3$, 27, 81,
 Rule: **Multiply the previous number by 3**

Write down the next two terms of the following sequence.

- 17, 16, 13, 8, **1**, **-7**

Write down the next two terms of the following sequence.

- 20, 17, 13, 8, **2**, **-5**

Write down the n th term of the sequence 6, 10, 14, 18, 22, ...

- $4n + 2$**

The n th term of a sequence is $n^2 + 3$.
 Write down the first three terms of the sequence.

- $1^2 + 3 = 4$**
 $2^2 + 3 = 7$
 $3^2 + 3 = 12$

Write down the n th term of the sequence 8, 15, 22, 29, 36, ...

- $7n + 1$**