Sequences Exercise

Friday, May 26, 2023   10:47 AM

Name: _____

Sequences – exercise

Find the pattern of the sequence and the missing terms.

$1^2 \; 2^2 \; 3^2 \; 4^2$

1. 1, 4, 9, 16, 25, __36__, __49__, __64__   pattern: __n^2__

1st ↑↑ ↑
2nd 3rd 4th

2. 2, 4, 8, 16, __32__, __64__, __128__   pattern: __2^n__

$2^1 \; 2^2 \; 2^3 \; 2^4$

3. -5, -2, 1, __4__, __7__, __10__   pattern: __+3 add 3__

6th

4. -8, 4, __16__, __28__, 40, __52__   pattern: __+12 add 12__

5. -5, 15, -45, __135__, __-405__, __1215__, -3645   pattern: __× (-3)__

6. 16, 4, 1, __$\frac{1}{4}$__, __$\frac{1}{16}$__, __$\frac{1}{64}$__   pattern: __÷4 or × ($\frac{1}{4}$)__

7. 3, 4.5, 6.75, __10.125__, __15.1875__, __22.78125__   pattern: __×(1.5)__

8. 2, 3 ½, 5, 6 ½, 8, __9.5__, __11__, __12.5__   pattern: __+1.5__

9. 1, 8, __27__, __64__, __125__, 216   pattern: __n^3__

n=1 ↑ ↑ n=2

↑ n=6

10. 1, 1, 2, 3, 5, 8, 13, __21__, __34__, __55__   pattern: __Fibonacci__