**Арифметична прогресія та її властивості**

1. Яку послідовність називають арифметичною прогресією?
2. Запишіть формулу n-го члена арифметичної прогресії.
3. Які з числових послідовностей є арифметичними прогресіями? Укажіть для них перший член і різницю.

А) 3; 7; 11; 15;

Б) 6; 7; 6; 7;

В) -4; -3; -2; -1;

Г) 2; 3; 6; 7.

1. Запишіть п’ять перших членів арифметичної прогресії ($a\_{n}$), різниця якої дорівнює *d:*

А) $a\_{1}=4, d=3$;

Б) $a\_{1}=2,6, d=-1,3$.

1. Запишіть три наступні члени арифметичної прогресії -5,2; -4,1; -3; -1,9;... .
2. В арифметичній прогресії ($a\_{n}$) $a\_{1}=-8, d=4,5$ знайдіть $a\_{5}, a\_{8}, a\_{25}.$
3. Знайдіть перший член арифметичної прогресії, якщо $a\_{7}=12, d=-3$.
4. Оленка прочитала книгу за 12 днів. Першого дня дівчинка прочитала 36 сторінок, а кожного наступного дня вона читала на 2 сторінки менше, ніж попереднього. Скільки сторінок Оленка прочитала за четвертий день, за десятий день, за останній день?
5. Чи містить арифметична прогресія 17; 22; 27; 32;…число 97?
6. Знайдіть номер першого додатного члена арифметичної прогресії

 -7,4; -7,1; -6,8; -6,5;… .

1. Арифметичну прогресію задано формулою $a\_{n}=5n-7$. Знайдіть суму $a\_{5}+a\_{9}+a\_{15}.$
2. При якому значенні m числа $m^{2}-4; m;2m+3;4m^{2}+5$ є послідовними членами арифметичної прогресії ($a\_{n}$)? Знайдіть різницю *d* арифметичної прогресії.

Прізвище, ім’я, по батькові\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Прізвище, ім’я, по батькові\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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