

SEQUENCES

A NUMERICAL SEQUENCE

A.1 FINDING NEXT NUMBER IN ARITHMETIC SEQUENCE

Ex 1:

6, 9, 12, 15, 18

Answer:

$\begin{array}{ccccccc} & +3 & & +3 & & +3 & & +3 \\ & \curvearrowright & & \curvearrowright & & \curvearrowright & & \curvearrowright \\ 6 & , & 9 & , & 12 & , & 15 & , & \boxed{18} \end{array}$

Ex 2:

30, 28, 26, 24, 22

Answer:

$\begin{array}{ccccccc} & -2 & & -2 & & -2 & & -2 \\ & \curvearrowright & & \curvearrowright & & \curvearrowright & & \curvearrowright \\ 30 & , & 28 & , & 26 & , & 24 & , & \boxed{22} \end{array}$

Ex 3:

50, 100, 150, 200, 250

Answer:

$\begin{array}{ccccccc} & +50 & & +50 & & +50 & & +50 \\ & \curvearrowright & & \curvearrowright & & \curvearrowright & & \curvearrowright \\ 50 & , & 100 & , & 150 & , & 200 & , & \boxed{250} \end{array}$

Ex 4:

20, 17, 14, 11, 8

Answer:

$\begin{array}{ccccccc} & -3 & & -3 & & -3 & & -3 \\ & \curvearrowright & & \curvearrowright & & \curvearrowright & & \curvearrowright \\ 20 & , & 17 & , & 14 & , & 11 & , & \boxed{8} \end{array}$

Ex 5:

7, 14, 21, 28, 35

Answer:

$\begin{array}{ccccccc} & +7 & & +7 & & +7 & & +7 \\ & \curvearrowright & & \curvearrowright & & \curvearrowright & & \curvearrowright \\ 7 & , & 14 & , & 21 & , & 28 & , & \boxed{35} \end{array}$

Ex 6:

36, 31, 26, 21, 16

Answer:

$\begin{array}{ccccccc} & -5 & & -5 & & -5 & & -5 \\ & \curvearrowright & & \curvearrowright & & \curvearrowright & & \curvearrowright \\ 36 & , & 31 & , & 26 & , & 21 & , & \boxed{16} \end{array}$

A.2 FINDING NEXT NUMBER IN GEOMETRIC SEQUENCE

Ex 7:

1, 2, 4, 8, 16

Answer:

$\begin{array}{ccccccc} & \times 2 & & \times 2 & & \times 2 & & \times 2 \\ & \curvearrowright & & \curvearrowright & & \curvearrowright & & \curvearrowright \\ 1 & , & 2 & , & 4 & , & 8 & , & \boxed{16} \end{array}$

Ex 8:

1, 3, 9, 27

Answer:

$\begin{array}{ccccccc} & \times 3 & & \times 3 & & \times 3 \\ & \curvearrowright & & \curvearrowright & & \curvearrowright \\ 1 & , & 3 & , & 9 & , & \boxed{27} \end{array}$

Ex 9:

32, 16, 8, 4, 2

Answer:

$\begin{array}{ccccccc} & \div 2 & & \div 2 & & \div 2 & & \div 2 \\ & \curvearrowright & & \curvearrowright & & \curvearrowright & & \curvearrowright \\ 32 & , & 16 & , & 8 & , & 4 & , & \boxed{2} \end{array}$

Ex 10:

81, 27, 9, 3

Answer:

$\begin{array}{ccccccc} & \div 3 & & \div 3 & & \div 3 \\ & \curvearrowright & & \curvearrowright & & \curvearrowright \\ 81 & , & 27 & , & 9 & , & \boxed{3} \end{array}$

Ex 11:

3, 6, 12, 24

Answer:

$\begin{array}{ccccccc} & \times 2 & & \times 2 & & \times 2 \\ & \curvearrowright & & \curvearrowright & & \curvearrowright \\ 3 & , & 6 & , & 12 & , & \boxed{24} \end{array}$