

Number Series

- 1) 1, 5, 13, 25, 41, ?  
a) 51    b) 57    c) 61    d) 63
- 2) 6, 13, 28, 59, ?  
a) 111    b) 113    c) 114    d) 122
- 3) 3, 15, ?, 63, 99, 143  
a) 27    b) 35    c) 45    d) 56
- 4) 5760, 960, ?, 48, 16, 8  
a) 120    b) 160    c) 192    d) 240
- 5) 1, 1, 2, 6, 24, ?, 720  
a) 100    b) 104    c) 108    d) 120
- 6) 12, 15, 19, 24, ?  
a) 28    b) 27    c) 30    d) 32
- 7) 72, 63, 54, 45, ?  
a) 36    b) 81    c) 27    d) 90
- 8) 20, 24, 33, 49, 74, 110, ?  
a) 133    b) 147    c) 159    d) 163
- 9) -1, 0, ?, 8, 15, 24  
a) 4    b) 3    c) 2    d) 1
- 10) 0, 7, 26, 63, ?  
a) 125    b) 126    c) 217    d) 124

1) (c) 61

$$1+4=5, \quad 5+8=13, \quad 13+12=25,$$

$$25+36=61, \quad 41+20=61$$

$$? = 61.$$

2) (d) 122

$$6 \times 2 + 1 = 13$$

$$59 \times 2 + 4 = 118 + 4$$

$$13 \times 2 + 2 = 28$$

$$= 122$$

$$28 \times 2 + 3 = 59$$

$$? = 122$$

3) (b) 35

$$2^2 - 1 = 4 - 1 = 3$$

$$10^2 - 1 = 100 - 1 = 99$$

$$4^2 - 1 = 16 - 1 = 15$$

$$12^2 - 1 = 144 - 1 = 143$$

$$6^2 - 1 = 36 - 1 = 35$$

$$8^2 - 1 = 64 - 1 = 63$$

$$? = 35$$

4) (c) 192

$$5760 \div 6 = 960$$

$$960 \div 5 = 192$$

$$192 \div 4 = 48$$

$$48 \div 3 = 16$$

$$? = 192$$

$$16 \div 2 = 8$$

5) (d) 120

$$\begin{array}{l} 1 \\ 1 \times 1 = 1 \\ 1 \times 2 = 2 \\ 2 \times 3 = 6 \end{array} \quad \begin{array}{l} 6 \times 4 = 24 \\ 24 \times 5 = 120 \\ 120 \times 6 = 720 \\ ? = 120. \end{array}$$

6) (c) 30

$$\begin{array}{l} 12 + 3 = 15 \\ 15 + 4 = 19 \end{array} \quad \begin{array}{l} 19 + 5 = 24 \\ 24 + 6 = 30 \end{array}$$

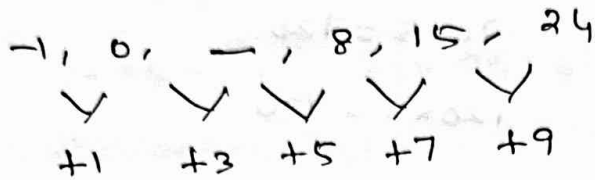
7) (a) 36

$$\begin{array}{l} 72 - 9 = 63 \\ 63 - 9 = 54 \\ 54 - 9 = 45 \end{array} \quad \begin{array}{l} 45 - 9 = 36 \\ ? = 36. \end{array}$$

8) (c) 159

$$\begin{array}{l} 20 + 2^2 = 20 + 4 = 24 \\ 24 + 3^2 = 24 + 9 = 33 \\ 33 + 4^2 = 33 + 16 = 49 \\ 49 + 5^2 = 49 + 25 = 74 \\ 74 + 6^2 = 74 + 36 = 110 \\ 110 + 7^2 = 110 + 49 = 159 \end{array}$$

9) (b) 3



$0 + 3 = 3.$

16) (d) 124

$1^3 - 1 = 1 - 1 = 0$

$2^3 - 1 = 8 - 1 = 7$

$3^3 - 1 = 27 - 1 = 26$

$4^3 - 1 = 64 - 1 = 63$

$5^3 - 1 = 125 - 1 = 124.$