

F.BF.B.6: Sigma Notation 4

1 Compute: $3\sum_{k=1}^4 k^2$

2 Evaluate: $\sum_{k=1}^4 2k^2$

3 Evaluate: $\frac{1}{2}\sum_{x=2}^5 x^2$.

4 Evaluate: $\sum_{k=3}^6 \frac{1}{2}k^2$

5 Evaluate: $\sum_{k=0}^3 (k^2 + 1)$

6 Evaluate: $\sum_{k=2}^4 (k^2 - 1)$

7 Evaluate: $\sum_{k=1}^4 (k^2 + 2)$

8 Evaluate: $\sum_{x=1}^4 (x^2 - 3)$

9 Evaluate: $\sum_{k=4}^6 (k^2 - 8)$

10 Evaluate: $\sum_{k=2}^4 (k^2 - 10)$

11 Evaluate: $\sum_{k=2}^4 (4 - k^2)$

12 Evaluate: $\sum_{k=5}^7 (k - 2)^2$

13 Evaluate: $\frac{1}{2}\sum_{x=1}^4 (x - 1)^2$

14 Evaluate: $\frac{2}{3} \sum_{a=1}^4 (a+1)^2$

15 Evaluate: $\sum_{k=2}^4 (2k+1)^2$

16 Evaluate: $\sum_{k=0}^3 (3k-2)^2$

17 Find the value of $\sum_{n=1}^3 (n+1)(n-1)$

18 Find the value of $\sum_{n=1}^3 (n^2+n)$

19 Evaluate: $\sum_{k=2}^4 k^2 - k$

20 Evaluate: $\sum_{k=2}^4 (k^3+1)$

21 Evaluate: $\sum_{k=1}^4 (k+2)^3$

22 Find: $\sum_{k=1}^3 k^k$

23 Evaluate: $\sum_{r=1}^3 r^{(r-1)}$

24 Evaluate: $\sum_{k=1}^3 \frac{6}{k}$

25 Find the value of $\sum_{k=1}^4 \frac{12}{k}$

26 Evaluate: $\frac{1}{3} \sum_{k=2}^4 |k-5|$

27 Find the value of $\sum_{k=1}^2 \left(\sin \frac{k\pi}{2} \right)$

F.BF.B.6: Sigma Notation 4
Answer Section

- 1 ANS:
90

REF: 068406siii
- 2 ANS:
60

REF: 019108siii
- 3 ANS:
27

REF: 068906siii
- 4 ANS:
43

REF: 080209siii
- 5 ANS:
18

REF: 088604siii
- 6 ANS:
26

REF: 018204siii
- 7 ANS:
38

REF: 018805siii
- 8 ANS:
18

REF: 089807siii
- 9 ANS:
53

REF: 088119siii
- 10 ANS:
-1

REF: 018704siii
- 11 ANS:
-17

REF: 089010siii

12 ANS:
50

REF: 068006siii

13 ANS:
7

REF: 069203siii

14 ANS:
36

REF: 069511siii

15 ANS:
155

REF: 019206siii

16 ANS:
70

REF: 060114siii

17 ANS:
11

REF: 069109siii

18 ANS:

n	$n^2 + n$	
1	$1^2 + 1$	2
2	$2^2 + 2$	6
3	$3^2 + 3$	12
Σ		20

REF: 068203siii

19 ANS:
20

REF: 019505siii

20 ANS:
102

REF: 088905siii

21 ANS:
432

REF: 019806siii

22 ANS:
32

REF: 018107siii

23 ANS:
12

REF: 069611siii

24 ANS:
11

REF: 019004siii

25 ANS:
25

REF: 088504siii

26 ANS:
2

REF: 010414siii

27 ANS:
1

REF: 068111siii