

Sequences and Series SS7: Arithmetic Series

Find the value of the sum:

$$1. \quad 4 + 7 + 10 + 13 + 16 + 19 + 22 + 25$$

$$2. \quad 9 + 6 + 3 + 0 - 3 - 6 - 9 - 12$$

$$3. \quad 5 + 10 + 15 + 20 + \dots$$

$$4. \quad 2 + 6 + 10 + 14 + \dots + 246$$

$$5. \quad 8 + 10 + 12 + \dots + 542$$

$$6. \quad 6 + 1 - 4 - 9 - 14 - 19 \dots -114$$

$$7. \quad \sum_{n=1}^{88} 3 + 7(n-1)$$

$$8. \quad \sum_{n=1}^{\infty} 2 + 11(n-1)$$

$$9. \quad \sum_{n=3}^{34} 3 + 3(n-1)$$

$$10. \quad \sum_{n=5}^{110} 5 + 6(n-1)$$