

Name : \_\_\_\_\_

## Arithmetic Series

T1S1

Determine the number of terms(n) in each arithmetic series.

1)  $0.2 + 0.5 + 0.8 + \dots$  upto n terms = 10

2)  $-\frac{2}{3} - \frac{23}{12} - \frac{19}{6} - \dots$  upto n terms =  $-\frac{181}{2}$

3)  $-48 - 54 - 60 - \dots$  upto n terms = -1782

4)  $-5.4 - 2.2 + 1 + \dots$  upto n terms = 255

5)  $\frac{5}{2} + \frac{29}{6} + \frac{43}{6} + \dots$  upto n terms =  $\frac{213}{2}$

6)  $102 + 107 + 112 + \dots$  upto n terms = 4988

7)  $\sqrt{3} + \sqrt{48} + \sqrt{147} + \dots$  upto n terms =  $145\sqrt{3}$

8)  $-12 - 8 - 4 - \dots$  upto n terms = 2220

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## Answer key

### Arithmetic Series

T1S1

Determine the number of terms( $n$ ) in each arithmetic series.

1)  $0.2 + 0.5 + 0.8 + \dots$  upto  $n$  terms = 10

**$n = 8$**

2)  $-\frac{2}{3} - \frac{23}{12} - \frac{19}{6} - \dots$  upto  $n$  terms =  $-\frac{181}{2}$

**$n = 12$**

3)  $-48 - 54 - 60 - \dots$  upto  $n$  terms =  $-1782$

**$n = 18$**

4)  $-5.4 - 2.2 + 1 + \dots$  upto  $n$  terms = 255

**$n = 15$**

5)  $\frac{5}{2} + \frac{29}{6} + \frac{43}{6} + \dots$  upto  $n$  terms =  $\frac{213}{2}$

**$n = 9$**

6)  $102 + 107 + 112 + \dots$  upto  $n$  terms = 4988

**$n = 29$**

7)  $\sqrt{3} + \sqrt{48} + \sqrt{147} + \dots$  upto  $n$  terms =  $145\sqrt{3}$

**$n = 10$**

8)  $-12 - 8 - 4 - \dots$  upto  $n$  terms = 2220

**$n = 37$**