

ARITHMETIC PROGRESSIONS

Name of the Student :

Date :

Sum of first n terms of an AP

Consider an AP : 3, 7, 11, 15, 19

$$a = \quad d = \quad n = \quad a_n = l =$$

$$S_5 = \quad + \quad + \quad + \quad + \quad \dots \dots (1)$$

Rewriting the terms in reverse order

$$S_5 = \quad + \quad + \quad + \quad + \quad \dots \dots (2)$$

Adding (1) and (2) term wise we get

$$2S_5 = \quad + \quad + \quad + \quad +$$

$$2S_5 = \quad (\quad)$$

$$S_5 = - (\quad)$$

$$S_5 = - (\quad + \quad)$$

$$\therefore S_n = - (\quad + \quad)$$

$$S_n = - (\quad + \quad)$$

$$S_n = - (\quad)$$