



Math on the Fly!



NAME: _____ DATE: _____

Arithmetic Series

Find the sum of the first 5 terms of each series.

1. $16 + 25 + 34 + \dots$

2. $45 + 37 + 29 + \dots$

3. $11 + 8 + 5 + \dots$

4. $(-15) + (-9) + (-3) + \dots$

5. $\frac{1}{2} + \frac{2}{3} + \frac{5}{6} + \dots$

6. $\pi + (\pi + 1) + (\pi + 2) + \dots$

Find the sum of the first 25 terms of each arithmetic series.

7. $3 + 5 + 7 + \dots$

8. $100 + 97 + 94 + \dots$

9. $(-10) + (-9) + (-8) + \dots$

10. $50 + 45 + 40 + \dots$

11. $9 + 3 + (-3) + \dots$

12. $4 + 11 + 18 + \dots$

SOLUTIONS

$$\boxed{1.} \quad 16 + 25 + 34 + 43 + 52 = 170$$

$$\boxed{2.} \quad 45 + 37 + 29 + 21 + 13 = 145$$

$$\boxed{3.} \quad 11 + 8 + 5 + 2 + -1 = 25$$

$$\boxed{4.} \quad (-15) + (-9) + (-3) + 3 + 9 = -15$$

$$\boxed{5.} \quad \frac{1}{2} + \frac{2}{3} + \frac{5}{6} + 1 + \frac{7}{6} = \frac{25}{6}$$

$$\boxed{6.} \quad \pi + (\pi + 1) + (\pi + 2) + (\pi + 3) + (\pi + 4) = 5\pi + 10$$

$$\boxed{7.} \quad \frac{25(3 + 51)}{2} = 675$$

$$\boxed{8.} \quad \frac{25(100 + 28)}{2} = 1600$$

$$\boxed{9.} \quad \frac{25(-10 + 14)}{2} = 50$$

$$\boxed{10.} \quad \frac{25(50 + -70)}{2} = -250$$

$$\boxed{11.} \quad \frac{25(9 + -135)}{2} = -1575$$

$$\boxed{12.} \quad \frac{25(4 + 172)}{2} = 2200$$