

PROBLEM SET 11-2
(Arithmetic Sequences)

Use the following information about arithmetic sequences to complete.

1. $a_1 = 2, a_2 = 5, a_{45} = \underline{\hspace{2cm}}$

2. $a_1 = 18, a_2 = 14, a_{51} = \underline{\hspace{2cm}}$

3. $a_1 = \frac{1}{3}, a_2 = 1, a_{17} = \underline{\hspace{2cm}}$

4. $a_1 = 8, a_2 = 11, a_{64} = \underline{\hspace{2cm}}$

5. $a_1 = 5, d = 3, a_n = 101, n = \underline{\hspace{2cm}}$

6. $a_1 = 88, d = -5, a_n = 13, n = \underline{\hspace{2cm}}$

7. $a_1 = 7, d = 4, a_n = 11, n = \underline{\hspace{2cm}}$

8. $a_1 = 57, d = -3, a_n = 0, n = \underline{\hspace{2cm}}$

Find the missing arithmetic means.

9. $42, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, 70$

10. $-107, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, -86$

11. $23, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, -31$

12. $-143, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, -215$

13. $53, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, 75$

14. $123, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, 55$

15. $47, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, -11$