Name

Class

Date

Arithmetic Sequences

**Determine whether each sequence is arithmetic. If so, identify the common difference.**

**1.** 0, −3, −6, −9, …

**2.** 3, 8, 13, 18, …

**3.** 3.2, 3.5, 3.8, 4.1, …

**Find the 43rd term of each sequence.**

**4.** 13.1, 3.1, −6.9, −16.9, …

**5.** 27, 24, 21, 18, …

**6. −**0.073, −0.081, −0.089, …

**Find the missing term of each arithmetic sequence.**

**7.** … −45,  , −39, … **8.** … −45,  , −12, … **9.** … 34,  , 345, …

**10**. Your cousin opened a bank account with a deposit of $256 dollars. After one week, she had$280 in her account. After two weeks, she had $304, and after three weeks she had $328. If this pattern continues, how much money will your cousin have in her account after 18 weeks?

**Write an explicit formula for each sequence. Then find the next two terms.**

**11.** $-32, -20, -8, 4, 16, … $ **12**. $1,1\frac{1}{3}, 1\frac{2}{3}, 2, … $

**Find the arithmetic mean *an* of the given terms.**

**13.** *an* – 1 = 5, *an* + 1 = 11

**14.** *an –* 1 = −8, *an* + 1 = –9