## **UNIT 7 EXERCISES 6-10**

TIME

- 2002B 8. Suppose July of year N has five Mondays. Which of the following must occur five times in August of year N? (Note: Both months have 31 days.)
  - (A) Monday (B) Tuesday (C) Wednesday (D) Thursday (E) Friday
- 9. A year is a leap year if and only if the year number is divisible by 400 (such as 2000) or is divisible by 4 but not by 100 (such as 2012). The 200th anniversary of the birth of novelist Charles Dickens was celebrated on February 7, 2012, a Tuesday. On what day of the week was Dickens born?
  - (A) Friday (B) Saturday (C) Sunday (D) Monday (E) Tuesday
- 2009B 10. A particular 12-hour digital clock displays the hour and minute of a day. Unfortunately, whenever it is supposed to display a 1, it mistakenly displays a 9. For example, when it is 1:16 PM the clock incorrectly shows 9:96 PM. What fraction of the day will the clock show the correct time?
  - (A)  $\frac{1}{2}$  (B)  $\frac{5}{8}$  (C)  $\frac{3}{4}$  (D)  $\frac{5}{6}$  (E)  $\frac{9}{10}$