Rational Numbers Practice

Choose one answer per question. Circle A, B, C, or D.

1. Which description of −11 is correct?
   A. It is both an integer and a rational number.
   B. It is rational and falls outside the integers.
   C. It is a nonnegative whole number.
   D. It is irrational.

2. Which expression represents zero as a ratio of integers with a nonzero denominator?
   A. 0/0
   B. 13/0
   C. 0/13
   D. −13/13

3. Which of these numbers is irrational?
   A. The square root of 64
   B. The square root of 18
   C. −0.375
   D. 7/12

4. Which fraction in lowest terms is exactly equal to −0.36?
   A. −3/8
   B. −9/250
   C. 9/25
   D. −9/25

5. The first decimal is 0.407407407… with 407 repeating forever. The second goes on forever without ever settling into a repeating block. How are the two numbers classified in that order?
   A. Irrational, then rational
   B. Rational, then irrational
   C. Both rational
   D. Both irrational

6. Which list puts −0.71, −7/10, −3/4, and −0.68 in order from least to greatest?
   A. −3/4, −0.71, −7/10, −0.68
   B. −0.68, −7/10, −0.71, −3/4
   C. −3/4, −7/10, −0.71, −0.68
   D. −0.71, −3/4, −7/10, −0.68

7. What is $-7/12 - (-5/18)$?
   A. $-1/3$
   B. $-31/36$
   C. $11/36$
   D. $-11/36$

8. What is $(-3/10) \div (9/25)$?
   A. $-6/5$
   B. $-27/250$
   C. $-5/6$
   D. $5/6$

9. Which of these fractions has a terminating decimal form?
   A. $-14/56$
   B. $-10/24$
   C. $-9/42$
   D. $-16/44$

10. Which fraction equals $-0.454545\ldots$ exactly, with 45 repeating forever?
   A. $5/11$
   B. $-9/20$
   C. $-1/22$
   D. $-5/11$

11. Which terminating decimal lies strictly between $-4/9$ and $-7/16$?
   A. -0.436
   B. -0.445
   C. -0.44
   D. -0.4375

12. A marker starts at $-11/8$ on a number line. It moves 0.6 unit to the right, then $5/16$ unit to the left. What is its final coordinate?
   A. $-37/80$
   B. $-87/80$
   C. $-27/16$
   D. $-183/80$

13. In −0.283333..., only the 3 repeats forever. Which fraction equals this number exactly?

A. −17/59
B. −283/1000
C. −28/99
D. −17/60

14. Let n be a positive integer. The fraction −n/60 must have a terminating decimal and lie strictly between −0.4 and −0.3. Which value of n works?

A. 21
B. 19
C. 22
D. 24

15. Start with x, subtract 1/6, then multiply the result by −3/2. The final value is exactly 0.8888..., with 8 repeating forever. What was x?

A. −41/54
B. −16/27
C. −23/54
D. 41/54