✓ Vocabulary and Concept Check

1. **VOCABULARY** How can you tell that a number is rational?

2. **WRITING** You have to write 0.63 as a fraction. How do you choose the denominator?

Tell whether the number belongs to each of the following number sets: *rational numbers, integers, whole numbers.*

3. -5

4. $-2.1\overline{6}$

5. 12

6. 0

Tell whether the decimal is *terminating* or *repeating.*

7. $-0.4848\ldots$

8. -0.151

9. 72.72

10. $-5.2\overline{36}$

📝 Practice and Problem Solving

Write the rational number as a decimal.

① 11. $\dfrac{7}{8}$

12. $\dfrac{5}{11}$

13. $-\dfrac{7}{9}$

14. $-\dfrac{17}{40}$

15. $1\dfrac{5}{6}$

16. $-2\dfrac{17}{18}$

17. $-5\dfrac{7}{12}$

18. $8\dfrac{15}{22}$

19. **ERROR ANALYSIS** Describe and correct the error in writing the rational number as a decimal.

$$\times \qquad -\dfrac{7}{11} = -0.6\overline{3}$$

Write the decimal as a fraction or mixed number in simplest form.

② 20. -0.9

21. 0.45

22. -0.258

23. -0.312

24. -2.32

25. -1.64

26. 6.012

27. -12.405

Order the numbers from least to greatest.

③ 28. $-\dfrac{3}{4}, 0.5, \dfrac{2}{3}, -\dfrac{7}{3}, 1.2$

29. $\dfrac{9}{5}, -2.5, -1.1, -\dfrac{4}{5}, 0.8$

30. $-1.4, -\dfrac{8}{5}, 0.6, -0.9, \dfrac{1}{4}$

31. $2.1, -\dfrac{6}{10}, -\dfrac{9}{4}, -0.75, \dfrac{5}{3}$

32. $-\dfrac{7}{2}, -2.8, -\dfrac{5}{4}, \dfrac{4}{3}, 1.3$

33. $-\dfrac{11}{5}, -2.4, 1.6, \dfrac{15}{10}, -2.25$

34. **COINS** You lose one quarter, two dimes and two nickels.

    a. Write the amount as a decimal.

    b. Write the amount as a fraction in simplest form.

35. **HIBERNATION** A box turtle hibernates in sand at $-1\dfrac{5}{8}$ feet. A spotted turtle hibernates at $-1\dfrac{16}{25}$ feet. Which turtle is deeper?