Lesson 42 • Repeating Decimals

Power Up

– ***Facts***

– ***Mental Math***

– ***Problem Solving***

New Concepts

– ***Examples***

– ***Practice Set***

Written Practice

© Harcourt Achieve and Stephen Hake. All rights reserved.

Facts Write the number that completes each equivalent measure.

1. 1 foot = 12 inches
2. 1 yard = 36 inches
3. 1 yard = 3 feet
4. 1 mile = 5280 feet
5. 1 centimeter = 10 millimeters
6. 1 meter = 1000 millimeters
7. 1 meter = 100 centimeters
8. 1 kilometer = 1000 meters
9. 1 inch = 2.54 centimeters
10. 1 pound = 16 ounces
11. 1 ton = 2000 pounds
12. 1 gram = 1000 milligrams
13. 1 kilogram = 1000 grams
14. 1 metric ton = 1000 kilograms
15. 1 kilogram ≈ 2.2 pounds
16. 1 pint = 16 ounces
17. 1 pint = 2 cups
18. 1 quart = 2 pints
19. 1 gallon = 4 quarts
20. 1 liter = 1000 milliliters

21–24. 1 milliliter of water has a volume of 1 cm^3 and a mass of 1 gram. One liter of water has a volume of 1000 cm^3 and a mass of 1 kg.

25–26. Water freezes at 32 °F and 0 °C.

27–28. Water boils at 212 °F and 100 °C.

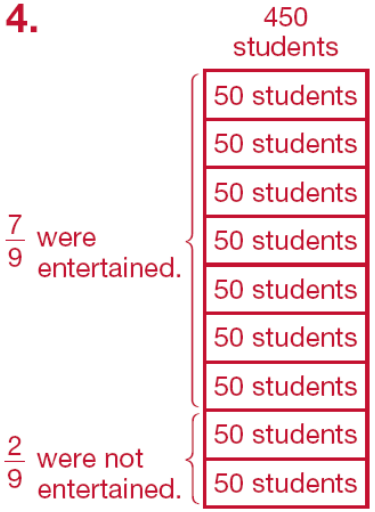
29–30. Normal body temperature is 98.6 °F and 37 °C.

© Harcourt Achieve and Stephen Hake. All rights reserved.

Written Practice

1. $\frac{2}{3}$
2. 27 students
3. 231 miles
4. a. 350 students
   b. 100 students
5. a. 5.1667
   b. 5.2727
6. a. 30 students
   b. 8 students
   c. $\frac{1}{3}$
   d. $\frac{3}{10}$

4.



7. 18 units²
8. a. 80 in.
   b. 320 in²
9. a. $0.1\overline{54}$
   b. 0.155
   c. thousandths
10. 0.607

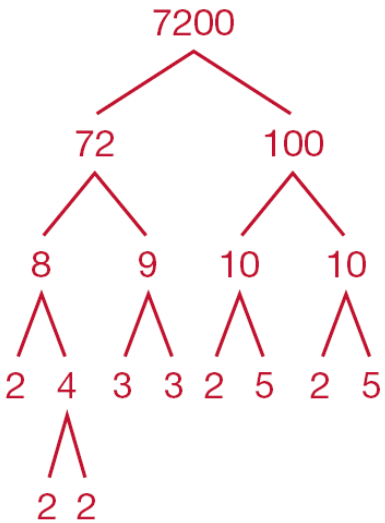
© Harcourt Achieve and Stephen Hake. All rights reserved.

Written Practice *continued*

11. a. Sample Space = {A1, A2, A3, A4, B1, B2, B3, B4, C1, C2, C3, C4}

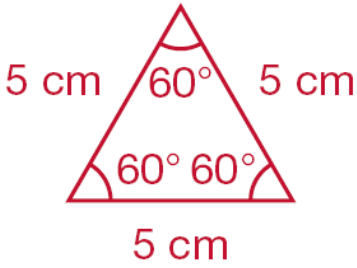
b. P(B4 or C4) = $\frac{2}{12} = \frac{1}{6}$

12. a. one possibility:



b. $2^5 \cdot 3^2 \cdot 5^2$

13.



14. 60

15. 35

16. 0.8

17. 4.4

18. 5.83

19. 60

© Harcourt Achieve and Stephen Hake. All rights reserved.

Written Practice *continued*

20. $4(11) = 44$; $(4 \cdot 5) + (4 \cdot 6) = 20 + 24 = 44$

21. a. Distributive Property

b. Inverse Property of Multiplication

22. \$0.36

23. $24 \div 6 = 4$

24. a. diameter

b. radius

25. 1.775

26. $12\frac{1}{3}$

27. $1\frac{1}{12}$

28. 48

29. The quotient is greater than 1 because the dividend is greater than the divisor; $1\frac{1}{3}$

30. $m\angle a = 140°$; $m\angle b = 50°$; $m\angle c = 130°$

$\angle b$ and $\angle c$, $\angle a$ and the 40° angle are supplementary, and $\angle b$ and the 40° angle are complementary.

© Harcourt Achieve and Stephen Hake. All rights reserved.