

Accelerated Math7 Chapter 3 Practice Test – Rational Numbers

1. Which decimal is equivalent to $-\frac{5}{9}$? A. -0.555 B. $-0.\overline{555}$ C. 0.595 D. $0.\overline{5959}$	B
2. What simplest term fraction is equivalent to the decimal -0.38 ?	$-\frac{19}{50}$
3. What symbol can be substituted for \bullet to make the following statement true? $-\frac{7}{9} \bullet \frac{7}{9} = -\frac{49}{63}$ $-0.\overline{7} \bullet -\frac{4}{7}$ $-\frac{4}{7} \cdot \frac{9}{9} = -\frac{36}{63}$ $-\frac{7}{9}$	$<$
4. A toll-free sales line sold 85 products for every 125 calls in one day. What is the daily success rate of the sales line?	68%
5. What is the fraction equivalent of $4\frac{5}{8}$? $\frac{8}{8} + \frac{8}{8} + \frac{8}{8} + \frac{8}{8} + \frac{5}{8} = \frac{37}{8}$	$\frac{37}{8}$
6. In a survey, 0.82 of students stated they ^{do} homework every day. What is this value written as a fraction? $\frac{82}{100} \div \left[\frac{2}{2}\right] = \frac{41}{50}$	$\frac{41}{50}$
7. What is the value of $\frac{2}{3}rs$ if $r = -\frac{6}{7}$ and $s = -\frac{3}{10}$? $\frac{2}{3} \left(-\frac{6}{7}\right) \left(-\frac{3}{10}\right) = \frac{6}{35}$	$+\frac{6}{35}$
8. What is the quotient of $\frac{7a}{9bc} \div \frac{21a}{12b}$? $\frac{7a}{9bc} \times \frac{12b}{21a} = \frac{7 \cdot 1 \cdot 4 \cdot 1}{3 \cdot 1 \cdot 3 \cdot 2 \cdot 1} = \frac{4}{9c}$	$\frac{4}{9c}$

$$-x(-4)$$

<p>9. What is the value of $-x - y$ if $x = -\frac{1}{5}$ and $y = \frac{7}{15}$?</p> <p>$x = -\frac{3}{15}$ $-x = \frac{3}{15}$</p> <p>$\frac{3}{15} - \frac{7}{15} = -\frac{4}{15}$</p>	$-\frac{4}{15}$
<p>10. Usually Cassandra tap dances for $1\frac{7}{8}$ hours a day. Today she danced for half again as long. For how long did she tap dance today?</p> <p>$1\frac{7}{8} + \frac{15}{16} = \frac{15}{8} + \frac{15}{16} = \frac{30}{16} + \frac{15}{16} = \frac{45}{16} = 2\frac{13}{16}$</p> <p>$\frac{15}{8} \times \frac{1}{2} = \frac{15}{16}$</p>	$2\frac{13}{16}$
<p>11. Four pieces of wood, each $14\frac{5}{6}$ inches long, are required for building a frame. If all four pieces are cut from one board, how long should the board be, to the nearest whole foot?</p> <p>$14\frac{5}{6} = \frac{89}{6}$</p> <p>$\frac{89}{6} \left(\frac{4}{1} \right) = \frac{356}{6} = \frac{178}{3} = 59\frac{1}{3}$</p> <p>$60 \text{ in} \div 12$</p>	5 ft
<p>12. What is the sum of a fraction and its additive inverse? Justify your answer with an example.</p> <p>$\frac{3}{15} + \left(-\frac{3}{15}\right) = 0$</p> <p>$\frac{a}{b} + \left(-\frac{a}{b}\right) = 0$</p>	0
<p>13. Juliana bought a container of licorice. She gave $\frac{2}{5}$ of the licorice to her friend, $\frac{2}{10}$ to her sister, and she kept the rest for herself. What fraction of the licorice did she keep for herself?</p> <p>$\frac{1}{1} - \left(\frac{2}{5} + \frac{2}{10}\right) \rightarrow \frac{2}{5} = \frac{4}{10} \rightarrow \frac{10}{10} - \frac{6}{10} = \frac{4}{10}$</p> <p>$\frac{4}{10} + \frac{2}{10} = \frac{6}{10}$</p>	<p>JULIANA KEPT</p> $\frac{2}{5}$
<p>14. What is the sum of $-3\frac{5}{6} + 7\frac{2}{3}$?</p> <p>$-\frac{23}{6} + \frac{23}{3} \rightarrow -\frac{23}{6} + \frac{46}{6} = \frac{23}{6} = 3\frac{5}{6}$</p>	$3\frac{5}{6}$
<p>15. In a school survey, Randy found that $\frac{5}{12}$ of the students normally wear sneakers, and that $\frac{8}{25}$ of those who wear sneakers normally wear white sneakers. What fraction of the student body normally wears white sneakers?</p> <p>WHAT IS $\frac{8}{25}$ OF $\frac{5}{12}$</p> <p>$\frac{8}{25} \times \frac{5}{12} = \frac{2}{15}$</p>	$\frac{2}{15}$ WEAR WHITE SNEAKERS