



Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

### Converting Rationals

Do the following Conversions to make a true statement.

<p>11. <math>9\frac{2}{3}</math> as an Improper Fraction is</p> $\boxed{\frac{29}{3}}$	<p>12. <math>\frac{34}{15}</math> as a Mixed Fraction is</p> $2\frac{4}{15}$	<p>13. <math>\frac{9}{5}</math> as a decimal is (long division, if necessary)</p> $1\frac{4}{5} = 1.8$
<p>14. <math>\frac{13}{100}</math> as a decimal is</p> $0.13$	<p>15. <math>\frac{4}{9}</math> as a decimal</p> $0.\overline{4}$	<p>16. Reduce <math>\frac{-16}{-44}</math></p> $\frac{8}{22} = \boxed{\frac{4}{11}}$
<p>17. <math>7\frac{24}{32}</math> as a fraction in lowest terms is</p> $\boxed{7\frac{3}{4}}$	<p>18. 0.132 as a fraction in lowest terms is</p> $\frac{132}{1000} = \frac{66}{500}$ $= \frac{33}{250}$	<p>19. 2.53 as a fraction is</p> $2\frac{53}{100}$
<p>20. 0.23232323... as a fraction</p> $\frac{23}{99}$	<p>21. <math>0.\overline{1}</math> as a fraction is</p> $\frac{1}{9}$	<p>22. 0.234343434... as a fraction is</p> $0.\overline{234} \times 1000 = 234.\overline{34}$ $\underline{0.\overline{234} \times 10 = 2.\overline{34}}$ $0.\overline{234} \times 990 = 232$ $0.\overline{234} = \frac{232}{990}$

$$= \boxed{\frac{116}{495}}$$

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Block: \_\_\_\_\_

**Unit Chapter 2 Test - Rational Numbers**  
**PART 2A - Calculator use is allowed.**

1. Complete the expression with the symbols  $<$ ,  $>$ , or  $=$ .

(a)  $2\frac{4}{7} \square 2\frac{3}{8}$

 $>$ 

(b)  $\frac{9}{17} \square 0.52$

 $>$ 

(c)  $1.5 \square -\frac{3}{-2}$

 $=$ 

$\frac{35}{13}$

2. Write the numbers below in descending order. Use the original numbers in your final answer. /1

$1\frac{3}{8}, -3\frac{3}{3}, 1\frac{15}{16}, -1\frac{10}{11}$

$1\frac{15}{16} > 1\frac{3}{8}, -1\frac{10}{11}, -3\frac{3}{3}$

$1.375, -4, 1.9375, -1.90$

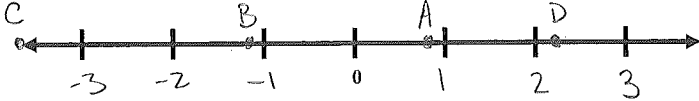
3. Place the following numbers on a number line using their letters. /4

A.  $\frac{5}{7}$

B.  $-1\frac{3}{8}$

C.  $-3\frac{7}{9}$

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

4. Which rational number is between  $-1.12$  and  $-1.13$  on a number line? /1

A.  $-\frac{11}{10}$

B.  $-\frac{223}{200}$

C.  $-\frac{9}{8}$

D.  $-\frac{112}{100}$

5. A decimal number, to the nearest tenth, between  $\frac{5}{8}$  and  $\frac{6}{7}$  is 0.7. /1

$0.625 \quad 0.857$

6. A fraction number, with denominator 4, between 4.5 and 5 is  $4\frac{3}{4}$ . /17. The value of the expression:  $-5.6 \div (-2.0) - (3.4) \times 1.7$  is /1

$= -2.98$

8. Solve for  $\square$  16

(a)  $-17.8 + \square = 6.61$   
 $+17.8 \quad +17.8$

$\square = 24.41$

(b)  $\frac{\quad}{-2.7} = -10.3$   
 $\times 2.7 \quad \times 2.7$

$\quad = 110.31$   
 $= +27.81$

(c)  $-4.2 \times \square = 15.96$   
 $\div -4.2 \quad \div -4.2$

$\square = 15.96 \div -4.2$   
 $= -3.8$

9. Solve for  $\square$  16

(a)  $\frac{2}{3} - \square = \frac{5}{12}$   
 $-\frac{2}{3} \quad -\frac{2}{3}$   
 $-\square = \frac{5}{12} - \frac{2}{3}$

$= -\frac{1}{4}$   
 $\square = \frac{1}{4}$

(b)  $\frac{-3}{16} \div \square = \frac{7}{8}$   
 $\frac{-3}{16} \quad = \frac{7}{8}$

$\square = -\frac{3}{16} \div \frac{7}{8}$   
 $= -\frac{3}{14}$

(c)  $\square \times \frac{5}{9} = \frac{20}{27}$   
 $\div \frac{5}{9} \quad \div \frac{5}{9}$

$\square = \frac{20}{27} \div \frac{5}{9}$   
 $= \frac{20}{27} \div \frac{15}{27}$   
 $= \frac{20}{15} = \frac{4}{3}$

**PART 2B – Word Problems: Show your work and complete with a sentence answer.**

10. One day, the temperature fell from  $8.5^\circ\text{C}$  to  $-2.4^\circ\text{C}$  in 5 hours. What was the temperature change per hour? 13

$8.5 - (-2.4) = 8.5 + 2.4$   
 $= 10.9$   
 $10.9 \div 5 = 2.18$

The temperature change per hour was  $2.18^\circ\text{C}$

11. Stocks gain or lose money over time. The following stocks are listed along with the price changes over a one-week period: Stock A +3.25, Stock B -5.18, Stock C +0.98, Stock D -1.25, and Stock E -0.48. List the five stocks in order, from the stock with the greatest gain to the stock with the greatest loss? 11

+3.25, +0.98, -0.48, -1.25, -5.18  
 A C E D B

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Block: \_\_\_\_\_

12. Lori had to deliver 48 flyers during her paper route. She delivered  $\frac{5}{12}$  of the flyers on one street, and then  $\frac{3}{7}$  of the remaining flyers on another street. How many flyers does Lori have left to deliver? 15

$$48 \times \frac{5}{12} = \frac{48}{1} \times \frac{5}{12} = 20$$

$$48 - 20 = 28$$

$$28 \times \frac{3}{7} = \frac{28}{1} \times \frac{3}{7} = 12$$

$$28 - 12 = 16$$

Lori has 16  
flyers left to  
deliver.

13. John owned 85 shares in a mining company. On Tuesday, the price of the stock was \$25.65 per share. John sold all his shares of stock on Friday, for a total value of \$3468.80.

- a) Determine how much money John lost or gained on the sale of his shares on Friday, compared to Tuesday's price. 13

$$25.65 \times 85 = 2180.25$$

$$3468.80 - 2180.25 = 1288.55$$

John gained  
\$1288.55

- b) Determine the value for each of John's shares on Friday 12

$$3468.8 \div 85 = 40.81$$

John's shares had a value of

\$40.81 each.

