

Key

Convert Fractions and Decimals

Skills Practice

Write each fraction or mixed number as a decimal.

1. $\frac{1}{8}$

0.125

2. $\frac{3}{16}$

0.1875

3. $-4\frac{4}{25}$

-4.16

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

4. -0.2

$-\frac{1}{5}$

5. 2.66

$2\frac{33}{50}$

6. 0.34

$\frac{17}{50}$

Problem Solving

7. Jorge read that 0.72 of his favorite granola bar was raisins. Find what fraction of the granola bar are raisins. Write in simplest form.

$\frac{18}{25}$

8. Brian completed a marathon race in 2 hours and 15 minutes. Write Brian's running time as a decimal.

$2\frac{15}{60} = 2.25$

9. Mr. Creswell surveyed his class and found that 12 out of the 30 students have at least one pet. Write the number of students who have at least one pet as a fraction in simplest form. Then write the fraction as a decimal.

$\frac{2}{5} = 0.4$

10. Marvin draws an ace five out of nine times. Write a fraction and a decimal to represent this situation.

$\frac{5}{9} = 0.\overline{5}$

Compare and Order Rational Numbers

Skills Practice

Replace each \square with $>$, $<$ or $=$ to make a true sentence.

1. $\frac{4}{5} < \frac{9}{10}$

2. $-\frac{8}{11} > -\frac{10}{11}$

3. $4\frac{1}{5} = 4\frac{2}{10}$

List each set of numbers in order from least to greatest.

4. $\frac{3}{5}, \frac{2}{3}, 0.65$

$\frac{3}{5}, 0.65, \frac{2}{3}$

5. $0.99, 0.89, \frac{7}{8}$

$\frac{7}{8}, 0.89, 0.99$

6. $-1\frac{3}{7}, -1.1, -1.43$

$-1.43, -1\frac{3}{7}, -1.1$

Problem Solving

7. Kristen ran one lap in 83.86 seconds, while Deborah time for one lap was $83\frac{7}{8}$ seconds. Which runner had the faster time?

Kristen

8. Shayla needs $2\frac{3}{5}$ hours to make dinner. Kevin needs $\frac{54}{21}$ hour to finish making his dinner. Who needs more time to finish making their meal?

Shayla

9. Brandon has finished 23 of his 50 homework problems. Tyrell has completed 15 of his 27 homework problems. Write the number of finished problems as a fraction of the total number of homework problems for each person. Who has a greater number of homework problems completed?

Brandon = $\frac{23}{50}$

Tyrell = $\frac{15}{27}$

Tyrell

10. Write the following lengths of caterpillars in order from shortest to longest. Express the lengths as decimals.

2.1 inches, $1\frac{7}{8}$ inches, 1.8 inches, $2\frac{1}{9}$ inches

1.8 in, 1.875 in, 2.1 in, 2.1 in.

CCSS - 7.NS.3, 7.EE.3

Add and Subtract Decimals

Skills Practice

1. $-1.25 + (-4.55)$ -5.8	2. $7.624 + (-0.05)$ 7.574
3. $68.79 - 9.18$ 59.61	4. $15.7 - (-6.4)$ 22.1
Evaluate the expression when $a = 7.28$ and $b = -4.1$	
5. $b - a$ $-4.1 - 7.28 = -11.38$	6. $a - (-2.01)$ 7.28 11.38

Problem Solving

7. Johnathan ran 400 meters in 58.01 seconds. What is the difference of his time and the school record of 55.49 seconds? 2.52 sec.	8. Brooklyn had 4.52 inches of rain in April, 5.23 inches of rain in May, and 3.41 inches of rain in June. How much rain did the city have during this three-month period? 13.16
9. Justin has a balance of \$789.34 in his bank account. These transactions appear on his bank: -45.75 , 145.67 , 503 , and -782.71 . After adjusting his account register, what is his new balance? $\$609.55$	10. Mya's groceries cost: \$2.57, \$7.77, \$5.08, and \$13.39. She gives the cashier \$35. Is that enough? If so, what is her change? If not, how much does she owe? NO $\\$3.81$

CCSS - 7.NS.1, 7.NS.3, 7.EE.3

Multiply and Divide Decimals

Skills Practice

1. $-7.39 \cdot 2.1$ -15.519	2. $-2.8 \cdot (-6.2)$ 17.36
3. $19.62 \cdot 5.07$ 99.4734	4. $-4.365 \div (-4.5)$ 0.97
5. $-13 \div 0.65$ -20	6. $32.8 \div 4.1 \cdot (-2)$ $8 \cdot (-2)$ -16

Problem Solving

7. You have \$75 to spend on daffodil bulbs. Boxes of bulbs cost \$19.95 per box, including tax. How many boxes can you buy? 3 boxes	8. Brenda wants to make 160 photocopies that each cost \$0.045. What is her total before tax? $\$7.20$
9. Gas costs \$2.88 per gallon. Albert filled up his car for \$43.20. How many gallons of gas did he get? 15 gal	10. It takes 1.8 yards of fabric to cover one bulletin board. Ms. Loom wants to cover 9 bulletin boards and use an additional 2.7 yards of fabric to cover an old chair. How much fabric will Ms. Loom need altogether? 18.9 yd

CCSS - 7.NS.2, 7.NS.3, 7.EE.3

Add and Subtract Fractions

Skills Practice

1. $\frac{7}{16} + \frac{5}{16}$ $\frac{12}{16} = \frac{3}{4}$	2. $-\frac{11}{12} - \frac{5}{12}$ $-\frac{16}{12} = -1\frac{1}{3}$
3. $\frac{3}{4} + \frac{1}{3} - \frac{11}{12}$ $\frac{1}{6}$	4. $-\frac{2}{3} - \left(-\frac{1}{2}\right)$ $-\frac{1}{6}$
5. $4\frac{3}{8} + \left(-\frac{7}{8}\right)$ $3\frac{1}{2}$	6. $5\frac{3}{5} - 7$ $-1\frac{2}{5}$

Problem Solving

7. Before lunch, Carol hiked $3\frac{5}{8}$ miles. After lunch, she hiked another $2\frac{7}{8}$ miles. How far did she hike altogether? $6\frac{1}{2}$ mi	8. On Monday, Tiffany's plant was $2\frac{3}{4}$ inches long. By Friday, it was $8\frac{1}{8}$ inches long. How much did the plant grow? $5\frac{3}{8}$ in
9. Bradley has ordered a steak from the meat market that weighs $1\frac{5}{8}$ pounds. There is a bone in the steak that weighs $\frac{7}{8}$ of a pound. How much does the meat weigh? $\frac{3}{4}$ lb.	10. Jamal needs to dig a ditch $15\frac{1}{2}$ yards long. Jamal digs $7\frac{3}{8}$ yards in the morning and another $3\frac{1}{4}$ yards after lunch. How much more of the ditch is left to dig? $4\frac{7}{8}$ yd

CCSS - 7.NS.1, 7.NS.3, 7.EE.3

Multiply and Divide Fractions

Skills Practice

1. $\frac{5}{8} \cdot \frac{7}{16}$ $\frac{35}{128}$	2. $-\frac{9}{4} \cdot \frac{5}{6}$ $-1\frac{7}{8}$
3. $6\frac{2}{7} \div 4$ $1\frac{4}{7}$	4. $\frac{9}{14} \div \left(-\frac{2}{7}\right)$ $-2\frac{1}{4}$
Evaluate each expression if $a = \frac{5}{8}$, $b = -\frac{7}{6}$ and $c = -1\frac{1}{2}$.	
5. $ac \left(\frac{5}{8} \cdot -1\frac{1}{2}\right)$ $-\frac{15}{16}$	6. $\frac{b}{c} = \frac{-\frac{7}{6}}{-1\frac{1}{2}} = \frac{7}{9}$

Problem Solving

7. Carolina has built her dog a bed that is $2\frac{1}{8}$ feet wide and $5\frac{1}{3}$ feet long. Find the area of the bed. $11\frac{1}{3}$	8. Over a period of 6 hours, the temperature had an average change of $-1\frac{1}{4}$ degrees Fahrenheit per hour. What was the total change in temperature over the 6-hour period? $-7\frac{1}{2}^{\circ}\text{F}$
9. The price of silver <u>dropped</u> a total of \$14 in $3\frac{1}{2}$ hours. What was the average change in price per hour? $-\$4$	10. Sharon walked $\frac{3}{4}$ mile in $\frac{1}{2}$ hour. At this rate, how far will Sharon walk in 1 hour? $1\frac{1}{2}$ mi

CCSS - 7.NS.2, 7.NS.3