

1. Select a number shown by the model. Mark all that apply.

1pt



6.1

16

1.6

$\frac{60}{10}$

$\frac{16}{10}$

$1\frac{6}{10}$

2. Ryan sold a jigsaw puzzle at a yard sale for three dollars and five cents. Which names this money amount in terms of dollars? Mark all that apply.

1pt

A 35.0

3.05

$3\frac{5}{100}$

E 3.50

\$3.05

F $\frac{305}{10}$

3. For numbers 3a–3e, select True or False for the statement.

5pts

3a. 0.2 is equivalent to $\frac{2}{100}$.

True

False

3b. $\frac{1}{10}$ is equivalent to 0.10.

True

False

3c. $\frac{70}{100}$ is equivalent to $\frac{7}{10}$.

True

False

3d. 0.60 is equivalent to $\frac{6}{100}$.

True

False

3e. 0.3 is equivalent to 0.30.

True

False

1 point for each correct choice

4. After selling some lemonade and cookies, Vivian and her brother Gil had 7-one dollar bills, 8 quarters, and 6 dimes. They agreed to divide the money equally.

Part A

What is the total amount of money that Vivian and Gil earned? Explain.

\$9.60; possible explanation: I counted the one-dollar bills to get \$7.00. Then I counted on 8 quarters: \$7.25, \$7.50, \$7.75, \$8.00, \$8.25, \$8.50, \$8.75, \$9.00. Then I counted on 6 dimes: \$9.10, \$9.20, \$9.30, \$9.40, \$9.50, \$9.60.

1pt for correct explanation

Part B

Gil said that he and Vivian cannot get equal amounts of money because 7 one-dollar bills cannot be divided evenly. Do you agree with Gil? Explain.

No; possible explanation: first, they share the quarters and dimes and get 4 quarters and 3 dimes each. Then they can change the 7 dollar bills into quarters. 1 dollar = 4 quarters, so 7 dollars = 7×4 or 28 quarters. They can each get 14 quarters. So, each person has a total of 18 quarters and 3 dimes. $\$4.50 + \$0.30 = \$4.80$.

1pt

5. Trisha walked $\frac{9}{10}$ of a mile to school. Shade the model. Then write the decimal to show how far Trisha walked.



Trisha walked 0.9 mile to school.

6. Cora paid $\frac{65}{100}$ of a dollar to buy a postcard from Grand Canyon National park in Arizona. What is $\frac{65}{100}$ written as a decimal in terms of dollars?

0.65

7. Chaz needs \$4.77 for new batteries. He has \$2.80. He needs \$1.97 more to have enough money for the batteries.



1 pt

8. Matthew walks $\frac{4}{10}$ mile to Zach's house. A fraction in hundredths equal to $\frac{4}{10}$ is $\frac{40}{100}$.

1 pt

9. Write a decimal in tenths that is **less** than 3.81 but **greater** than 3.0.

Possible answers: 3.8, 3.7, 3.6, 3.5, 3.4, 3.3, 3.2, or 3.1

3 pts possible

10. Maya and three of her friends have three quarters and one nickel to spend.

Part A

If Maya and her friends share the money equally, how much will each person get? Explain how you found your answer.

\$0.20: possible explanation: three quarters and one nickel are equal to \$0.80. I can think of \$0.80 as 8 dimes. When I divide 8 dimes equally, each person will receive 2 dimes or \$0.20.

1 pt for correct explanation

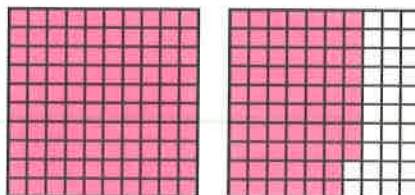
Part B

Maya says that each person will receive $\frac{2}{10}$ of the money. Do you agree? Explain.

No; possible explanation: each person receives \$0.20, which is $\frac{2}{10}$ of a dollar, not $\frac{2}{10}$ of the money. Since there are 4 people who share the money equally, each person will receive $\frac{1}{4}$ of the money.

2 pts

11. Shade the model to show $1\frac{68}{100}$. Then write the mixed number in decimal form.



1.68

1 pt for correctly shading

1 pt for correct mixed number



12. Jen is making a recipe for pancakes. A recipe calls for $\frac{4}{10}$ kilogram flour and $\frac{12}{100}$ kilogram sugar.

Part A

If Jen measures correctly and combines the two amounts, how much flour and sugar will she have? Show your work.

$\frac{52}{100}$ kilogram; $\frac{4}{10} = \frac{40}{100}$; $\frac{40}{100} + \frac{12}{100} = \frac{52}{100}$

Part B

How can you write your answer as a decimal?

0.52 kilogram

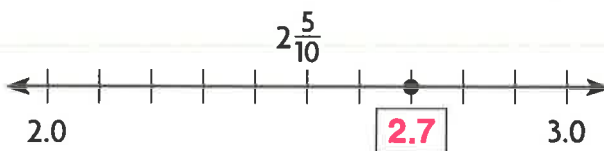
13. The U.S. Senate in Washington D.C. has 100 elected members. Last year, 30 senators ran for re-election. What decimal is equivalent to $\frac{30}{100}$?

0.3 or 0.30

14. Complete the table.

\$ Bills and Coins	Money Amount	Fraction or Mixed Number	Decimal
4 pennies	\$0.04	$\frac{4}{100}$	0.04
Possible answer: 2 quarters	\$0.50	$\frac{5}{10}$ or $\frac{50}{100}$	0.50
Possible answer: 6 dimes	\$0.60	$\frac{60}{100}$ or $\frac{6}{10}$	0.60
2 \$1 bills 8 pennies	\$2.08	$2\frac{8}{100}$	2.08

15. The point on the number line shows the number of miles Emily rides her bike. Write the decimal that correctly names the point.



GO ON

16. Julian is building a birdhouse. The house is $\frac{21}{100}$ meter high without the roof. The roof is $\frac{3}{10}$ meter high. What is the height of the birdhouse with the roof? Choose a number from each column to complete an equation to solve.

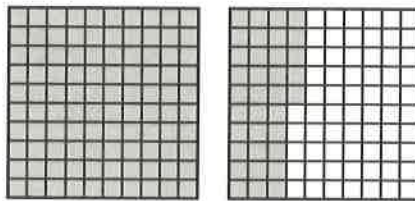
1pt

$$\frac{3}{10} + \frac{21}{100} = \begin{array}{|c|} \hline \frac{31}{100} \\ \hline \end{array} + \begin{array}{|c|} \hline \frac{21}{10} \\ \hline \end{array} = \begin{array}{|c|} \hline \frac{51}{10} \\ \hline \end{array} \text{ meter high.}$$

$\frac{30}{100}$ $\frac{12}{100}$ $\frac{51}{100}$
 $\frac{3}{100}$ $\frac{21}{100}$ $\frac{24}{100}$

17. Jack drew a model to represent the number of miles from his home to the park. What decimal represents the part of the model that is shaded?

1pt



represents 1.35

18. For numbers 18a–18f, select True or False for the inequality.

- | | | |
|------------------------|---------------------------------------|--|
| 18a. $0.2 > 0.25$ | <input type="radio"/> True | <input checked="" type="radio"/> False |
| 18b. $0.32 < 0.65$ | <input checked="" type="radio"/> True | <input type="radio"/> False |
| 18c. $4.8 > 4.08$ | <input checked="" type="radio"/> True | <input type="radio"/> False |
| 18d. $0.13 = 0.31$ | <input type="radio"/> True | <input checked="" type="radio"/> False |
| 18e. $\$4.16 > \0.16 | <input checked="" type="radio"/> True | <input type="radio"/> False |
| 18f. $3.4 < 3.40$ | <input type="radio"/> True | <input checked="" type="radio"/> False |

6pts possible

1 point for each correct choice.

19. Fill in the numbers to find the sum.

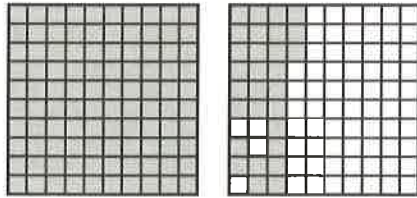
1pt

$$\frac{2}{10} + \frac{\boxed{30}}{100} = \frac{5}{\boxed{10}}$$



1pt

20. Charlie's model shows the number of hours he exercised yesterday. Which fraction, mixed number, or decimal does the model show? Mark all that apply.



- 1.33
- $1\frac{33}{100}$
- 133
- $1\frac{3}{100}$
- 13.3
- $1\frac{33}{10}$

21. Gene lives 0.6 miles from school. Kate lives 0.51 miles from school.

4 pts possible

Part A

Who lives closer to school? Explain.

Kate; possible explanation: 0.6 is 6 tenths and 0.51 is 5 tenths 1 hundredth. Compare the tenths, since 6 tenths > 5 tenths, Gene lives farther from the school, so Kate lives closer.

1pt

Part B

How can you write each distance as a fraction? Explain.

Possible answers: $0.6 = \frac{6}{10}$ and $0.51 = \frac{51}{100}$; possible explanation: 0.6 is the same as 6 tenths and 0.51 is the same as 51 hundredths.

1pt for correct explanation

Part C

Gene is walking to school to get a book he forgot. Then he is walking to Kate's house. Will he walk more than a mile or less than a mile? Explain.

More than a mile; possible explanation: $\frac{6}{10} > \frac{5}{10}$ or $\frac{1}{2}$ and $\frac{51}{100} > \frac{50}{100}$ or $\frac{1}{2}$. So $\frac{6}{10} + \frac{51}{100} > \frac{1}{2} + \frac{1}{2}$. Since $\frac{1}{2} + \frac{1}{2} = 1$, you know that $\frac{6}{10} + \frac{51}{100} > 1$.

1pt

