

Review Packet #2

Name Answer Key /57

Standards Practice

CC.5.NF.3 Interpret a fraction as division of the numerator by the denominator ($\frac{a}{b} = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

1. Mrs. Lee cut a pie into 6 pieces. She gave each of her 4 children a piece of pie.



If Mrs. Lee divided the entire pie equally among her children, what fraction of the remaining pieces of pie did Mrs. Lee give each child?

- A $1\frac{1}{4}$ piece of pie
- B $\frac{1}{2}$ piece of pie
- C $\frac{1}{3}$ piece of pie
- D $\frac{1}{4}$ piece of pie
2. Earl read a book that has 252 pages. He read 30 pages each day. Which statement **best** explains how Earl finished the book?
- A Earl read 30 pages per day for 9 days and on day 10 he read 32 pages.
- B Earl read 30 pages per day for 8 days and on day 9 he read 32 pages.
- C Earl read 30 pages per day for 8 days and on day 9 he read 12 pages.
- D Earl read 30 pages per day for 7 days and on day 8 he read 32 pages.
3. Mr. Yardi will buy pens for all 19 employees at his store. He wants to give each employee 3 pens. If he buys pens in packages of 12, what is the minimum number of packages of pens Mr. Yardi needs to buy to have enough pens?

5 packages

4. Marla saw a 12-meter wood plank into 8 equal pieces. Which statement **best** explains how Marla cut the wood plank?

- A She cut the wood plank into pieces that are each $\frac{1}{3}$ meter long.
- B She cut the wood plank into pieces that are each $\frac{1}{2}$ meter long.
- C She cut the wood plank into pieces that are each 1 meter long.
- D She cut the wood plank into pieces that are each $1\frac{1}{2}$ meter long.

5. Martin wrote the division sentence below in his notebook.

$$16 \div 3$$

Without calculating the answer, between what two numbers does the answer lie?

- A between 5 and 6
- B between 4 and 5
- C between 3 and 4
- D between 2 and 3
6. Mr. Chen had a piece of fencing that was 78 feet long. He cut the fencing into 24 equal pieces for a project. How long was each piece of fencing that Mr. Chen cut?

$3\frac{1}{4}$ feet

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7. Mark invited 14 friends to his birthday party. He will give each friend 2 balloons. He will buy balloons in packages of 5. What is the minimum number of packages of balloons Mark must buy to have enough balloons to give to each of his 14 friends?

A 3
 B 6
 C 8
 D 10

8. To make picture frames, Jim cut 103 inches of ribbon into pieces that were each 13 inches long. Which statement **best** explains how Jim cut the ribbon?

A Jim cut the ribbon into 10 pieces of equal length and had 3 inches left over.
 B Jim cut the ribbon into 8 pieces of equal length and had 0 inches left over.
 C Jim cut the ribbon into 7 pieces of equal length and had 12 inches left over.
 D Jim cut the ribbon into 7 pieces of equal length and had 2 inches left over.

9. Libby has 27 toy horses. She wants to store them in 5 different boxes. To find out how many horses go into each box, she writes $\frac{27}{5}$. What is another way to write $\frac{27}{5}$?

$$27 \div 5$$

10. Staci wants to share a 5-pound brick of chocolate with her brother and sister. If each of the 3 children receive the same amount of chocolate, between what two numbers of pounds does the answer lie?

A between 1 pound and 2 pounds
 B between 2 pounds and 3 pounds
 C between 3 pounds and 4 pounds
 D between 4 pounds and 5 pounds

11. Mrs. Hodges bakes 7 biscuits per tray. Which statement **best** explains how many trays it take Mrs. Hodges to bake 50 biscuits?

A She bakes 7 full trays of biscuits and another tray with 2 biscuits.
 B She bakes 6 full trays of biscuits and another tray with 7 biscuits.
 C She bakes 7 full trays of biscuits and another tray with 1 biscuit.
 D She bakes 8 full trays of biscuits and another tray with 6 biscuits.

12. Marilyn wrote the division sentence below on the board.

$$99 \div 10$$

Without calculating the answer, between what two numbers does the answer lie?

Between 9 & 10

CC.5.NF.4a Interpret the product $(\frac{a}{b}) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$.

1. Use the fraction model below.



What is the product of $(\frac{2}{5}) \times 5$?

- A 2
- B 3
- C 4
- D 5

2. Elin saw this number sentence written on her mother's soup recipe.

$$(\frac{3}{4}) \times 2 = 1\frac{1}{2}$$

Which scenario **best** explains the equation on the soup recipe?

- A The recipe uses $\frac{3}{4}$ cup of carrots and halving the recipe uses $1\frac{1}{2}$ cups of carrots.
- B The recipe uses 4 cups of carrots and doubling the recipe uses $1\frac{1}{2}$ cups of carrots.
- C The recipe uses 3 cups of carrots and halving the recipe uses $1\frac{1}{2}$ cups of carrots.
- D The recipe uses $\frac{3}{4}$ cup of carrots and doubling the recipe uses $1\frac{1}{2}$ cups of carrots.

3. Which of the following shows another way to write $(\frac{5}{7}) \times 4$?

- A $5 \times 7 \div 4$
- B $4 \times 7 \div 5$
- C $5 \times 4 \div 7$
- D $5 \div 4 \times 7$

4. Thad has $\frac{8}{9}$ of a bottle of dish soap to use to wash the dishes. If he uses $\frac{1}{15}$ of the remaining soap in the bottle in one evening, which expression shows how much of the bottle he used?

- A $\frac{(8 \times 8)}{(15 \times 15)}$
- B $\frac{(8 \times 15)}{(9 \times 1)}$
- C $\frac{(8 \times 1)}{(9 \times 15)}$
- D $\frac{(8 \times 9)}{(1 \times 15)}$

5. Tim and Tom each used $\frac{2}{3}$ of a spool of black thread to make their costumes for the play. How many spools of black thread did they use in all?

1 $\frac{1}{3}$ spools

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6. Al has $\frac{9}{10}$ of a bag of raisins he wants to share with his brother. Al writes the equation below to find out how much of the original bag each brother will receive.

$$\left(\frac{9}{10}\right) \times \left(\frac{1}{2}\right) = \frac{9}{20}$$

Which scenario **best** explains how the raisins were shared?

- A** Al is sharing equally with his brother and each will receive $\frac{1}{9}$ of a bag of raisins.
- B** Al is sharing equally with his brother and each will receive $\frac{1}{2}$ of a bag of raisins.
- C** Al is sharing equally with his brother and each will receive $\frac{9}{20}$ of a bag of raisins.
- D** Al is sharing equally with his brother and each will receive $\frac{9}{10}$ of a bag of raisins.

7. Which of the following shows another way to write $\left(\frac{9}{11}\right) \times \left(\frac{1}{3}\right)$?

A $\frac{(9 \times 1)}{(11 \times 3)}$

B $\frac{(9 \times 11)}{(1 \times 3)}$

C $\frac{(9 \times 9)}{(1 \times 1)}$

D $\frac{(11 \times 11)}{(3 \times 3)}$

8. Use the fraction model below.



What is the product of $\frac{4}{5} \times 3$?

2 $\frac{2}{5}$

9. Paul is filling up gas cans at the gas station. He has 5 half-gallon containers.



How much gas will Paul pump in all if he fills each of his containers?

- A** 1 gallon
- B** $2\frac{1}{2}$ gallons
- C** $4\frac{1}{2}$ gallons
- D** 5 gallons
10. Which is another way to write $11 \times 17 \div 15$?

A $\left(\frac{17}{11}\right) \times 15$

B $\left(\frac{15}{11}\right) \times 17$

C $\left(\frac{11}{17}\right) \times 15$

D $\left(\frac{11}{15}\right) \times 17$

11. What is another way to write $\left(\frac{7}{9}\right) \times 13$?

$7 \times 13 \div 9$

CC.5.NF.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

- On an average day $\frac{1}{40}$ of the students at Brown Middle School are absent. During an outbreak of flu, twice as many students are absent. What fraction of students is this?
 - A $\frac{1}{20}$
 - B $\frac{1}{30}$
 - C $\frac{1}{40}$
 - D $\frac{1}{80}$

- Mr. Lamparski has $40\frac{1}{2}$ feet of rope. He uses $\frac{3}{4}$ of it to support a tree he planted in his yard. How much rope did Mr. Lamparski use to support the tree?
 - A $330\frac{3}{8}$ feet
 - B $33\frac{3}{8}$ feet
 - C $30\frac{3}{8}$ feet
 - D $3\frac{3}{8}$ feet

- A mower uses $\frac{5}{16}$ gallon of gas to mow the back yard. The side yard is only $\frac{2}{3}$ the size of the back yard. How much gas will be needed to mow the side yard? Express your answer in lowest terms.

$\frac{5}{24}$ gallon of gas

- Ella found this expression in her math textbook.

$$4\frac{1}{7} \times 9\frac{5}{6}$$

What is the product?

- A $\frac{31}{42}$
- B $40\frac{1}{42}$
- C $40\frac{1}{31}$
- D $40\frac{31}{42}$

- Helen bought 4 gallons of paint to redecorate her family room. If she uses $\frac{4}{5}$ of the paint on the family room walls, how much paint does Helen have left over?

- A $\frac{1}{5}$ gallon
- B $\frac{4}{5}$ gallon
- C $1\frac{4}{5}$ gallons
- D $3\frac{1}{5}$ gallons

- Judy wrote the following expression on the board for her students.

$$3\frac{5}{8} \times \frac{6}{7}$$

What is the product? Express your answer as a mixed number in lowest terms.

~~$3\frac{2}{28}$~~

$3\frac{3}{28}$

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7. A paper shipment weighs $\frac{7}{8}$ ton. The sales department receives $\frac{1}{4}$ of the shipment. How much does their share of the paper weigh?

A $\frac{7}{28}$ ton

B $\frac{7}{32}$ ton

C $\frac{7}{12}$ ton

D $\frac{7}{2}$ tons

8. Jamie, Jill, and their two daughters shared half of a watermelon. If they shared equally, how much of the watermelon did each receive?

A $\frac{1}{8}$ watermelon

B $\frac{1}{4}$ watermelon

C $\frac{3}{8}$ watermelon

D $\frac{3}{4}$ watermelon

9. Bria needs 64 yards of ribbon for her craft project. She checks her supplies and has 3 rolls of ribbon, each with $\frac{3}{5}$ of a roll left. If ribbon comes in rolls of 25 yards, does Bria have enough ribbon to complete her project? Explain how you know.

No, Bria has 15 yards of ribbon on each spool and $15 \times 3 = 45$.
 $45 < 64$

10. A recipe calls for $\frac{3}{4}$ cup of molasses. If you triple the recipe, how much molasses is needed?

A $\frac{1}{4}$ cup

B $1\frac{1}{3}$ cups

C $1\frac{1}{4}$ cups

D $2\frac{1}{4}$ cups

11. Ms. Lucas has a package of 150 water balloons to use for field day at school. If she uses $\frac{7}{10}$ of the package, which equation shows how many water balloons are used during field day?

A $150 + \frac{7}{10} = 150\frac{7}{10}$

B $150 - \frac{7}{10} = 149\frac{3}{10}$

C $150 \times \frac{7}{10} = 105$

D $150 \div \frac{7}{10} = 214\frac{2}{7}$

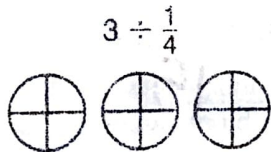
12. Leo and 2 friends ate $\frac{7}{8}$ of 2 large pizzas for dinner. How much pizza was left over after dinner? Express your answer in lowest terms.

$\frac{1}{4}$ pizza

CC.5.NF.7b Interpret division of a whole number by a unit fraction, and compute such quotients.

- Which scenario **best** explains the expression $10 \div \frac{1}{3}$?
 - A Sally has 10 feet of ribbon. If she cuts $\frac{1}{3}$ -foot strips to make bows, how many bows can Sally make?
 - B Sally has 10 feet of ribbon. If she cuts $\frac{1}{6}$ -foot strips to make bows, how many bows can Sally make?
 - C Sally has 13 feet of ribbon. If she cuts $\frac{1}{3}$ -foot strips to make bows, how many bows can Sally make?
 - D Sally has 13 feet of ribbon. If she cuts $\frac{1}{6}$ -foot strips to make bows, how many bows can Sally make?

- When students walked into math class, they saw this expression and model on the board.



What is the quotient?

- A 1
- B 3
- C 7
- D 12

- Tanesha found this expression in her science textbook.

$6 \div \frac{1}{5}$



What is the quotient?

- A 1
- B 11
- C 30
- D 35

- Margarita solved the equation below.

$4 \div \frac{1}{7} = 28$

Which of the following can Margarita use to check her work?

- A $28 \times \frac{1}{7} = \frac{1}{4}$
- B $28 \times \frac{1}{4} = 7$
- C $28 \times 4 = 112$
- D $28 \times \frac{1}{7} = 4$

- Mr. Wang solved $9 \div \frac{1}{4} = 36$. What equation can Mr. Wang use to check his work?

$36 \times \frac{1}{4} = 9$

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6. Which scenario **best** explains the expression $16 \div \frac{1}{4}$?

A Piper is using a two-pan balance. How many $\frac{1}{16}$ -ounce weights will Piper use to balance 16 ounces?

B Piper is using a two-pan balance. How many $\frac{1}{4}$ -ounce weights will Piper use to balance 16 ounces?

C Piper is using a two-pan balance. How many $\frac{1}{4}$ -ounce weights will Piper use to balance 64 ounces?

D Piper is using a two-pan balance. How many $\frac{1}{16}$ -ounce weights will Piper use to balance 64 ounces?

7. Dieter solved $15 \div \frac{1}{5} = 75$. Which of the following can Dieter use to check his work?

A $75 \times \frac{1}{5} = 15$

B $75 \div \frac{1}{5} = 375$

C $15 \times \frac{1}{5} = 3$

D $15 \div 3 = 5$

8. Erick solved $20 \div \frac{1}{2} = 40$. Which of the following can Erick use to check his work?

A $40 \div \frac{1}{2} = 80$

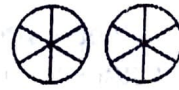
B $10 \div \frac{1}{2} = 20$

C $40 \times \frac{1}{2} = 20$

D $20 \times \frac{1}{2} = 10$

9. Diego wants to solve this expression.

$$2 \div \frac{1}{6}$$



What is the quotient?

A 18

B 12

C 8

D 3

10. Mr. Hahn wants to talk about division in class today and writes the expression and draws the model on the board.

$$5 \div \frac{1}{3}$$



What is the quotient?

15

CC.5.NF.7c Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem.

1. Mr. and Mrs. Turner ate $\frac{3}{4}$ of a pizza. They want to split the remaining part equally between their two sons. How much of the pizza will each son receive?



- A $1\frac{1}{2}$ pizzas
 B $\frac{3}{4}$ of a pizza
 C $\frac{1}{4}$ of a pizza
 D $\frac{1}{8}$ of a pizza

2. Stella does a series of exercises for $\frac{1}{3}$ hour every morning. If she does 5 different exercises every morning and spends the same amount of time on each exercise, how long does Stella do each exercise?

- A $\frac{1}{35}$ hour
 B $\frac{1}{15}$ hour
 C $\frac{1}{3}$ hour
 D $\frac{5}{3}$ hours

3. Nadine has 3 yards of ribbon to wrap birthday party favors. If each favor uses $\frac{1}{5}$ yard of ribbon, how many favors can Nadine wrap?

15 favors

4. Mrs. Marhefka has a 5-pound bag of sugar to divide among her cooking students. If she decides to give each team of students $\frac{1}{2}$ pound of sugar, how many teams will receive sugar?

- A 2 teams
 B 3 teams
 C 10 teams
 D 12 teams

5. Jill has 10 yards of ribbon to make bows for the centerpieces for her wedding. If each bow uses $\frac{1}{3}$ yard of ribbon, how many bows can Jill make?

- A $\frac{3}{10}$ bow
 B 3 bows
 C 13 bows
 D 30 bows

6. Kristen bought a container of spice for her chili recipe. If a batch of the recipe calls for $\frac{1}{11}$ of the container of spice, how many batches of chili can Kristen make from that container?

11 batches

Name _____

7. The Barrows family cooks a 5-pound box of pasta for their family reunion. How many $\frac{1}{4}$ -pound cup servings of pasta did they make?

A $\frac{1}{20}$ serving
 B $\frac{5}{4}$ servings
 C 9 servings
D 20 servings

8. Jordan walks the track every evening for 1 hour. If it takes him $\frac{1}{5}$ hour to walk a mile, how many miles does he walk each evening?

A 1 mile
B 5 miles
 C 10 miles
 D 15 miles

9. A knitting group used 248 yards of yarn to knit tassels for snow hats. If $\frac{1}{2}$ yard of yarn is used for each tassel, how many tassels did the knitting group make?

496 tassels

10. For her tea party, Micah makes nametags for each of her 6 dolls using $\frac{1}{3}$ yard of tape.

$$\frac{1}{3} \div 6$$

How much tape did she use for each doll's nametag?

A $\frac{1}{36}$ yard
B $\frac{1}{18}$ yard
 C 2 yards
 D 18 yards

11. Rosie buys $\frac{1}{2}$ watermelon at the farmer's market. She shares it equally with her parents.

$$\frac{1}{2} \div 3$$

How much of the watermelon will each get?

A $\frac{1}{8}$ watermelon
B $\frac{1}{6}$ watermelon
 C $\frac{1}{5}$ watermelon
 D $\frac{3}{2}$ watermelons

12. Rich bought 2 pounds of ground beef to make hamburgers. How many $\frac{1}{3}$ -pound hamburgers can Rick make?

6 hamburgers