5th Grade Math

Week of March 8 - March 12, 2021



Name ____

^{*} Please do not complete until advised by teacher*

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	·				

Find each product.

1. $\frac{1}{2} \times \frac{3}{4}$

2. $\frac{9}{10} \times \frac{2}{3}$

- 3. What is the product of $\frac{5}{8} \times \frac{3}{4}$?
- a. $\frac{8}{32}$
- b. $\frac{15}{32}$
- c. $\frac{8}{12}$
- d. $\frac{15}{12}$

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nswer (with unit):				
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Name









Additional Practice 8-5 **Multiply Two Fractions**

Another Look!

Find $\frac{3}{4} \times \frac{2}{3}$.

You can multiply the numerators and denominators to find the product



Step 1

Multiply the numerators, and then multiply the denominators.

$$\frac{3\times2}{4\times3} = \frac{6}{12} = \frac{1}{2}$$

Step 2

Check that the answer is reasonable.

Since $\frac{1}{2}$ is less than 1, the answer is reasonable.

2. $\frac{3}{4} \times \frac{5}{9} = \frac{\boxed{\times 5}}{4 \times \boxed{}} = \frac{15}{\boxed{}} = \frac{\boxed{}}{\boxed{}}$

4. $\frac{4}{7} \times \frac{1}{2} = \frac{\square \times \square}{\square \times \square} = \frac{\square}{\square} = \frac{\square}{\square}$

6. $\frac{4}{9} \times \frac{2}{3} = \frac{\square \times \square}{\square \times \square} = \frac{\square}{\square}$

Leveled Practice In 1-24, find each product.

1.
$$\frac{7}{8} \times \frac{2}{3} = \frac{\square \times 2}{8 \times \square} = \frac{\square}{24} = \frac{\square}{\square}$$

3.
$$\frac{4}{5} \times \frac{1}{8} = \frac{\square \times 1}{5 \times \square} = \frac{\square}{\square} = \frac{\square}{\square}$$

5.
$$\frac{3}{5} \times \frac{3}{7} = \frac{\square \times \square}{\square \times \square} = \frac{\square}{\square}$$

7.
$$\frac{11}{12} \times \frac{2}{5}$$

8.
$$\frac{2}{3} \times \frac{4}{5}$$

9.
$$\frac{1}{6}$$
 ×

9.
$$\frac{1}{6} \times \frac{2}{3}$$

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

11.
$$\frac{6}{7} \times \frac{1}{5}$$

12.
$$\frac{2}{3} \times \frac{5}{9}$$

13.
$$\frac{1}{3}$$
 of $\frac{3}{10}$

14.
$$\frac{4}{5}$$
 of $\frac{5}{6}$

15.
$$\frac{3}{7} \times \frac{2}{7}$$

16.
$$\frac{1}{2}$$
 of $\frac{2}{3}$

17.
$$\frac{4}{5} \times \frac{2}{3}$$

18.
$$\frac{3}{10} \times \frac{3}{10}$$

19.
$$\left(\frac{1}{2} + \frac{1}{3}\right) \times \frac{8}{9}$$

20.
$$\left(\frac{2}{3} - \frac{1}{6}\right) \times \frac{11}{12}$$

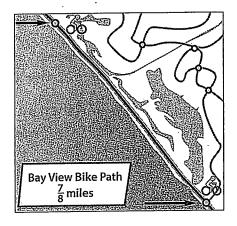
21.
$$\left(\frac{3}{5} + \frac{1}{4}\right) \times \frac{2}{3}$$

22.
$$\frac{7}{8} \times \left(\frac{1}{3} + \frac{1}{3}\right)$$

23.
$$\left(\frac{11}{12} - \frac{5}{6}\right) \times \frac{3}{4}$$

24.
$$\frac{1}{3} \times \left(\frac{9}{10} - \frac{3}{5}\right)$$

- **25.**) A full bottle holds $\frac{1}{4}$ gallon of juice. If $\frac{3}{5}$ of the juice has been poured out, how much juice is left in the bottle?
- (26.) Natasha has 3 pounds of apples and $2\frac{1}{2}$ pounds of grapes. If she gives $\frac{1}{3}$ of her apples to Silvie, how many pounds of apples does she have left?
- 27.) Keyshia is riding her bike on Bay View bike path. Keyshia's bike got a flat tire $\frac{2}{3}$ of the way down the path and she had to stop. How far did Keyshia ride?



- **28.** Of the apps on Juan's tablet, $\frac{3}{4}$ are gaming apps, and $\frac{5}{7}$ of the gaming apps are action games. What fraction of the apps on Juan's tablet are action games?
- 29. Higher Order Thinking In Mrs. Hu's classroom, $\frac{4}{5}$ of the students have a dog as a pet. Of the students who have a dog as a pet, $\frac{2}{3}$ also have a cat as a pet. If there are 45 students in her class, how many have both a dog and a cat as pets?
- **30.** Patrick walks $\frac{9}{10}$ mile to the gym. How far has he walked when he has covered $\frac{2}{3}$ of the distance to the gym?
- 31. Construct Arguments Which is greater, $\frac{4}{7} \times \frac{1}{4}$ or $\frac{4}{7} \times \frac{1}{6}$? Explain.

✓ Assessment Practice

32. Choose all the multiplication sentences that have $\frac{5}{6}$ as the missing part.

$$\frac{2}{3} \times \frac{3}{9} = \frac{7}{9}$$

33. Choose all the expressions that have $\frac{8}{15}$ as a product.

$$\frac{7}{10} \times \frac{1}{5}$$

$$\begin{array}{c} \begin{array}{c} \begin{array}{c} 10 \\ \hline 11 \\ \hline \end{array} \times \begin{array}{c} 8 \\ \hline \end{array}$$

Find the area of each rectangle with the following measurements.

1. length = $\frac{3}{10}$ ft

2. $\operatorname{length} = \frac{2}{3} \operatorname{ft}$

width = $\frac{1}{3}$ ft

- width = $\frac{3}{4}$ ft
- 3. Juno calculated the area of a square to be $\frac{4}{9}$ square yard. Which shows the side length of the square?
- a. $\frac{2}{9}$
- b. $\frac{4}{9}$
- c. $\frac{2}{3}$
- d. $\frac{8}{9}$

On Dan's eReader	$\frac{2}{3}$ of the books are fict	tion. Of the fiction b	ooks, $\frac{4}{5}$ are myster	ies. What fraction o	f the books
on Dan's eReader a	re mysteries?		J		
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			•		
				·	
Answer (with unit):			No.	•	
Equation that match	hes your work:			•	
					7
Explain your thinkin	g:				_









Additional Practice 8-6
Area of a Rectangle

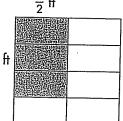
Another Look!

Cole wants to cover the back of a picture frame with colorful paper. What is the area of the back of Cole's picture frame?

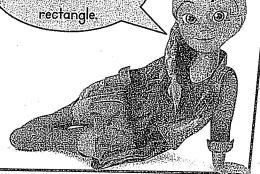
Multiply to find the area of the back of the picture frame.

$$A = \frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$$

The area of the back of Cole's picture frame is $\frac{3}{8}$ square foot.



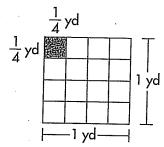
Multiply the length by the width to find the area of a rectangle.



In **1–5**, find each area.

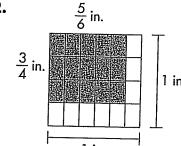
HW*1-8, 9-10, 12-13

1.

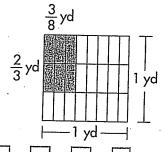


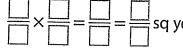
$$\frac{1}{4} \times \frac{1}{4} = \frac{\Box}{\Box}$$
 sq yd

2.

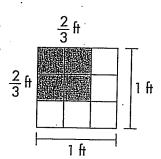


3.

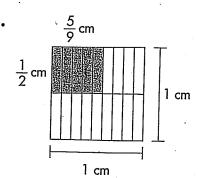




4.

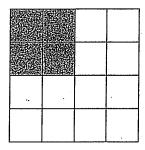


5



- **6.** Find the area of a square with side length $\frac{3}{4}$ yard.
- 7. Find the area of a rectangle with side lengths $\frac{5}{4}$ feet and $\frac{5}{3}$ feet.
- 8. Find the area of a square with side length $\frac{7}{12}$ inch.

- crate is $\frac{3}{4}$ yard long and $\frac{2}{3}$ yard wide. The crate is also 2 feet tall. What is the area of the top of the crate?
- Mike is making macaroni salad. For each bowl of macaroni salad, he needs $\frac{1}{3}$ cup of macaroni. How many cups of macaroni will he use if he makes 27 bowls of macaroni salad?
- 11. Higher Order Thinking Dorothy is installing purple and white tile in her kitchen. She made a diagram of the layout showing the area of both colors. Write two expressions that describe the area of the purple tile.



- Construct Arguments Corey and Veronica each multiplied $\frac{1}{2} \times \frac{5}{2}$.

 Corey got $\frac{6}{4}$ and Veronica got $\frac{5}{4}$. Which student found the correct answer? Explain.
- he has completed 612 hours. If Colby attended school the same number of hours each day for a total of 68 days, how many hours did he attend school each day?

Assessment Practice

- **14.** Tomás found the area of a rectangle to be $\frac{1}{6}$ square inch. Which could be the side lengths of the rectangle?
 - (A) $\frac{1}{4}$ inch and $\frac{2}{3}$ inch
 - (B) $\frac{1}{3}$ inch and $\frac{1}{3}$ inch
 - \bigcirc $\frac{1}{6}$ inch and $\frac{1}{6}$ inch
 - ① $\frac{1}{2}$ inch and $\frac{1}{12}$ inch

- **15.** Jackie found the area of a square to be $\frac{25}{16}$ square feet. Which shows the side length of the square?
 - \triangle $\frac{5}{4}$ feet
 - $\mathbb{B} = \frac{5}{8}$ foot
 - \bigcirc $\frac{5}{16}$ foot

Find each product.

1.
$$3\frac{1}{2} \times 4$$

2.
$$\frac{2}{3} \times 1\frac{2}{7}$$

A rectangular poster is $\frac{1}{4}$ yard wide and $\frac{3}{4}$ yard tall. What	at is its area?	
	•	
Answer (with unit):		
equation that matches your work:		
explain your thinking:		







Another Look!

Millwood City is constructing a new highway through town. The construction crew can complete $5\frac{3}{5}$ miles of road each month. How many miles will they complete in $6\frac{1}{2}$ months?

Additional Practice 8-7 Multiply Nixed Numbers

Step 1

Round the mixed numbers to whole numbers to estimate the product.

So, they can complete about 42 miles.

Step 2

Rename the mixed numbers.

$$5\frac{3}{5} \times 6\frac{1}{2} = \frac{28}{5} \times \frac{13}{2}$$

Step 3

Multiply the numerators and the denominators.

$$\frac{28}{5} \times \frac{13}{2} = \frac{364}{10} = 36\frac{2}{5}$$

The construction crew will complete $36\frac{2}{5}$ miles of highway in $6\frac{1}{2}$ months.

Step 4

Check for reasonableness.

Compare your product to your estimate.

 $36\frac{2}{5}$ is close to 42, so the answer is reasonable.

In 1-4, estimate the product. Then complete the multiplication.

Thurs 13-21

1.
$$1\frac{1}{4} \times 2\frac{1}{4} = \frac{\boxed{}}{4} \times \frac{9}{\boxed{}} = \frac{5 \times \boxed{}}{\boxed{} \times 4} = \frac{45}{\boxed{}} = \boxed{}\frac{\boxed{}}{16}$$

2.
$$3\frac{1}{2} \times 2\frac{2}{3} = \frac{7}{\square} \times \frac{\square}{3} = \frac{\square \times 8}{2 \times \square} = \frac{\square}{6} = \frac{1}{\square}$$

3.
$$5\frac{1}{3} \times 2\frac{3}{4} = \frac{\square}{3} \times \frac{11}{\square} = \boxed{}$$

4.
$$4\frac{1}{5} \times 2\frac{1}{4} = \frac{1}{5} \times \frac{1}{4} = \frac{1}{5} \times \frac{1}{4}$$

In 5-12, estimate the product. Then find each product

5.
$$4 \times 6\frac{1}{4}$$

6.
$$3\frac{2}{3} \times 2\frac{3}{4}$$

7.
$$\frac{7}{8} \times 4\frac{1}{6}$$

8.
$$1\frac{1}{2} \times 2\frac{3}{4}$$

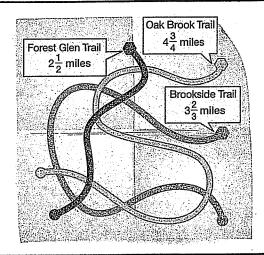
9.
$$8\frac{1}{10} \times \frac{2}{3}$$

10.
$$4\frac{1}{12} \times 7$$

11.
$$3\frac{4}{5} \times 7\frac{1}{2}$$

12.
$$6\frac{2}{3} \times 4\frac{4}{5}$$

- 13. How can you use estimation to find $9\frac{1}{2} + 9\frac{1}{2} + 9\frac{1}{2} + 9\frac{1}{2} + 9\frac{1}{2}$?
- 14. A model of a house is built on a base that measures $7\frac{3}{4}$ in. wide and $9\frac{1}{5}$ in. long. What is the area of the model house's base?
- **15.** Algebra Write a mixed number for t so that $2\frac{3}{4} \times t$ is more than $2\frac{3}{4}$.
- 16. Wocabulary Give an example of a benchmark fraction and an example of a mixed number.
- 17. Make Sense and Persevere Leon and Marisol biked the Brookside Trail to the end and back. Then they biked the Forest Glen Trail to the end and back before stopping to eat. How far did they bike before they stopped to eat?



- 18. The One World Trade Center in New York City is about $3\frac{1}{5}$ times as tall as the Washington Monument in Washington, D.C. The Washington Monument is 555 feet tall. About how tall is the One World Trade Center?
- 19. Higher Order Thinking Lucie can walk about $3\frac{4}{5}$ miles each hour. About how far can she walk in 2 hours 45 minutes?

Assessment Practice

20. Choose all that are true.

$$\frac{1}{4} \times 1\frac{7}{8} = \frac{15}{32}$$

$$2\frac{1}{2} \times 2\frac{1}{2} = 5\frac{1}{2}$$

$$3\frac{1}{5} \times 2\frac{1}{4} = 6\frac{2}{5}$$

$$\int \frac{1}{4} \times \frac{1}{2} = 2\frac{5}{8}$$

21. Choose all that are true.

$$8\frac{5}{6} \times 2 = 17\frac{2}{3}$$

$$\int 5\frac{1}{2} \times 5\frac{1}{2} = 30\frac{1}{4}$$

$$9\frac{1}{5} \times \frac{3}{5} = 9\frac{4}{5}$$

$$6\frac{3}{4} \times 3\frac{1}{4} = 19$$

Find each product.

1.
$$1\frac{1}{2} \times 2\frac{2}{3}$$

2.
$$2\frac{3}{4} \times 3\frac{1}{3}$$

March 11, 2021

Emilio needs	s to know how much area e sandbox will cover.	to clear for his son's s	square sandbox. Each s	ide of the sandbox is $\frac{3}{4}$ y	ard. Find the
Answer (wit	th unit):at matches your work:				
Equation in	at matches your work.				
Explain youi	r thinking:		W ₂		
					- 1

Enrichment

Multiply It!

Directions: Solve each problem using the standard algorithm.

Explain your reasoning for solving one of the problems above.

Multi-Digit Multiplying

Directions: Solve each problem using the standard algorithm.

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Enrichment

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