

Grade 5 - Dividing Unit Fractions and Whole Numbers - Worksheet

Common Core 5.NF.B.7a, 5.NF.B.7b, 5.NF.B.7c · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

These 20 problems practice standard 5.NF.B.7: dividing a unit fraction by a whole number and dividing a whole number by a unit fraction. You will use bar models and number lines, check answers with multiplication, and solve story problems.

The problems start with quick one-step divisions and grow to multi-step word problems about food, ribbon, laps and paint. Draw a picture whenever you get stuck.

Grade 5 · Common Core State Standards: **5.NF.B.7a, 5.NF.B.7b, 5.NF.B.7c**

Exercise 1 - Half divided by 3

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

Exercise 2 - Fourth divided by 2

Find $\frac{1}{4} \div 2$.

Exercise 3 - Third divided by 5

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

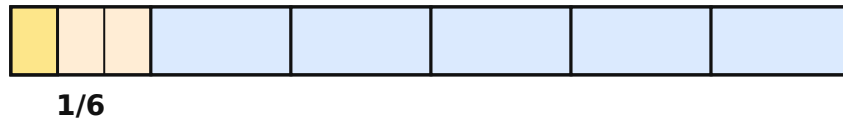
Exercise 4 - Fifth divided by 4

Find $\frac{1}{5} \div 4$.

Exercise 5 - Sixth divided by 3 with a model

Find $\frac{1}{6} \div 3$. The model shows one sixth cut into 3 equal pieces.

One whole cut into 6 equal parts



Cut that part into 3 equal pieces



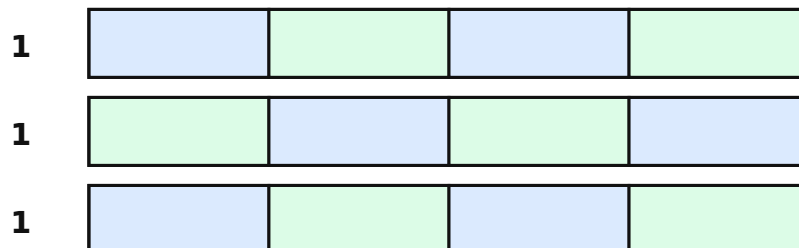
One sixth cut into 3 equal pieces.

Exercise 6 - Four wholes in halves

Find $4 \div \frac{1}{2}$.

Exercise 7 - Three wholes in fourths

Find $3 \div \frac{1}{4}$. Use the picture to help.



Each whole is cut into 4 equal pieces

Three wholes, each cut into fourths.

Exercise 8 - Five wholes in thirds

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

Exercise 9 - Two wholes in fifths

Find $2 \div \frac{1}{5}$.

Exercise 10 - Six wholes in sixths

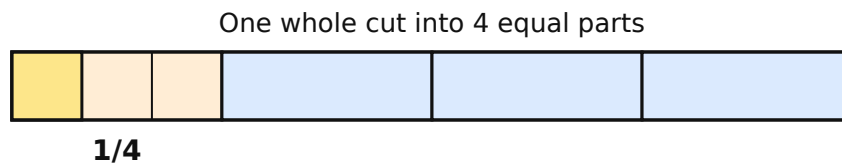
Find $6 \div \frac{1}{6}$.

Exercise 11 - Check with multiplication

Find $\frac{1}{8} \div 3$. Then write a multiplication sentence that checks the answer.

Exercise 12 - Write the division sentence

Write a division equation and find the quotient for the model.



One fourth cut into 3 equal pieces.

Exercise 13 - Find the missing number

Find the number that makes the equation true: $7 \div \frac{1}{?} = 28$.

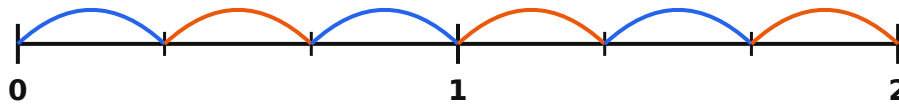
Exercise 14 - Compare two quotients

Compare $\frac{1}{4} \div 2$ and $\frac{1}{4} \div 3$ using $>$, $<$ or $=$.

Exercise 15 - Jumps on a number line

Find $2 \div \frac{1}{3}$ using the number line.

Each jump is $\frac{1}{3}$



A number line marked in thirds.

Exercise 16 - Trail mix for four

Solve. Maya has $\frac{1}{2}$ pound of trail mix. She shares it equally among 4 friends. How much does each friend get?

Exercise 17 - Ribbon pieces

Solve. Jamal has 5 yards of ribbon. He cuts it into pieces that are each $\frac{1}{4}$ yard long. How many pieces does he make?

Exercise 18 - Brownie pan

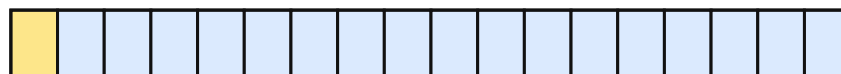
Solve. After the bake sale, $\frac{1}{3}$ of a pan of brownies is left. Six students share it equally. What fraction of the whole pan does each student get?

One whole cut into 3 equal parts



$\frac{1}{3}$

Cut that part into 6 equal pieces



One third of the pan cut into 6 pieces.

Exercise 19 - Laps around the track

Solve. Priya wants to run 3 miles. One lap around the school track is $\frac{1}{8}$ mile. (a) How many laps is 3 miles? (b) She has finished 18 laps. How many laps are left?

Exercise 20 - Paint for a sign

Solve. Ethan pours $\frac{1}{2}$ gallon of paint equally into 3 jars. He uses 2 jars to paint a sign. How much paint does he use?