ALBERT

Name _____ Date _____

Dividing Whole Numbers by Unit Fractions Worksheet

Grade 5 · Common Core 5.NF.B.7b

> Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for 4 ÷ (1/5), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 × (1/5) = 4.

Practice

Builds the skill step by step.

1. $2 \div \frac{1}{2} = ?$

2. $3 \div \frac{1}{3} = ?$

3. $4 \div \frac{1}{4} = ?$

4. Which multiplication fact checks that $5 \div \frac{1}{2} = 10$?

   A. $10 \div 5 = 2$

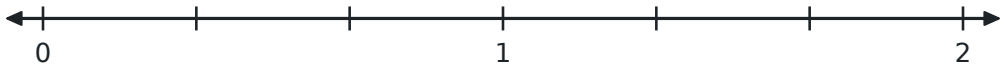
   B. $\frac{1}{2} \times \frac{1}{10} = \frac{1}{20}$

   C. $10 \times \frac{1}{2} = 5$

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

5. $1 \div \frac{1}{6} = ?$

6. Use the number line. How many thirds are in 2?



7. $6 \div \frac{1}{2} = ?$

8. How many $\frac{1}{5}$-meter pieces can be cut from a 2-meter strip?

9. $3 \div \frac{1}{4} = ?$

10. Which is equal to $4 \div \frac{1}{3}$?

    A. $\frac{4}{3}$

    B. $\frac{1}{12}$

    C. 7

    D. 12

ALBERT

Name _____ Date _____

Dividing Whole Numbers by Unit Fractions Worksheet

Grade 5 · Common Core 5.NF.B.7b

On Level

Grade-level practice.

1. $5 \div \frac{1}{4} = ?$

2. $7 \div \frac{1}{2} = ?$

3. Which story matches $3 \div \frac{1}{4}$?

   A. 3 pizzas are each cut into fourths. How many slices are there?

   B. 3 pizzas are shared equally by 4 people. How much does each person get?

   C. $\frac{1}{4}$ of 3 pizzas is eaten. How much pizza is eaten?

   D. 3 people each eat $\frac{1}{4}$ of a pizza. How much do they eat in all?

4. $8 \div \frac{1}{3} = ?$

5. $10 \div \frac{1}{5} = ?$

6. $6 \div \frac{1}{6} = ?$

7. How does $4 \div \frac{1}{2}$ compare to 4?

   A. It is less than 4.

   B. It is equal to 4.

   C. It is greater than 4.

   D. There is no way to tell.

8. $9 \div \frac{1}{2} = ?$

9. A whole number divided by $\frac{1}{3}$ equals 15. What is the whole number?

10. $12 \div \frac{1}{4} = ?$

ALBERT

Name _____ Date _____

Dividing Whole Numbers by Unit Fractions Worksheet

Grade 5 · Common Core 5.NF.B.7b

Challenge

Multi-step and word problems that stretch it.

1. $2 \div \frac{1}{8} = ?$

2. 6 divided by a unit fraction equals 42. What is the unit fraction?

3. Eva says $3 \div \frac{1}{2} = \frac{3}{2}$. Find the correct quotient.

4. Which expression has the greatest value?

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

   B. $1 \div \frac{1}{7}$

   C. $3 \div \frac{1}{3}$

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

5. $2 \div \frac{1}{3} \div \frac{1}{2} = ?$ Work from left to right.

6. How much greater is $3 \div \frac{1}{5}$ than $3 \div \frac{1}{4}$?

7. Which pair of expressions are equal to each other?

   A. $2 \div \frac{1}{3}$ and $3 \div \frac{1}{2}$

   B. $2 \div \frac{1}{3}$ and $\frac{1}{3} \div 2$

   C. $4 \div \frac{1}{2}$ and $4 \times \frac{1}{2}$

   D. $5 \div \frac{1}{5}$ and 1

8. $20 \div \frac{1}{10} = ?$

9. Divide 7 by $\frac{1}{3}$. Then multiply the quotient by $\frac{1}{3}$. What number do you get?

10. How many times as great is $4 \div \frac{1}{2}$ as $4 \div 2$?