GeniusKite

Kids' Thinking Skills

Math Workbook

Grade 5
Ages 10-11





123

3/4

0.125

Math Practice and Thinking Challenges

GeniusKite Team

Math Thinking for Parents

A short guide / 1 of 2

How each section works

Every section has six pages. The first page starts with a short "learn it" box that explains the idea in plain words. The next pages give practice, then a screen-free hands-on activity, and the last page is a thinking challenge where your child explains, checks or spots a mistake.

Decimals and powers of ten

Grade 5 extends place value to thousandths. Multiplying by 10, 100 or 1,000 moves each digit to the left. Line up decimal points to add and subtract, and estimate first to place the decimal point when multiplying or dividing.

Fractions grow up

Children add and subtract fractions with unlike denominators, multiply fractions and divide with unit fractions. Folding paper and the fraction strips on page 90 show why 1/2 x 1/3 = 1/6 and why 4 / 1/2 = 8.

Bigger division

Dividing by two-digit numbers starts with a good estimate. Partial quotients (taking away friendly groups like 10 or 20 of the divisor) build understanding before the standard method.

MATH / WARM-UP

Ten Times or One Tenth?



Name: _____ Warm-up 1 / 3

Read each question. Write your answer on the line.

A digit in one place is worth 10 times what it is worth in the place to its right, and 1/10 of what it is worth in the place to its left. Powers of ten: $10^2 = 10 \times 10 = 100$ and $10^3 = 10 \times 10 \times 10 = 1{,}000$. Multiplying by 10, 100 or 1,000 moves each digit 1, 2 or 3 places to the left; dividing moves them to the right.

1. The 4 in 400 is worth how many times the 4 in 40?

2. What is the value of the 6 in 2,615,034?

3. Write 10^3 as a whole number.

4. Write 10^2 as a whole number.

5. How many tens are in 3,000?

6. The 7 in 70 is worth 10 times the 7 in ___.

7. Write 5×10^3 as a whole number.

8. What is the value of the 9 in 90,412?



Pip's tip: Each place is 10 times the place to its right and 1/10 of the place to its left.