



RAINBOW Division

Legend has it there's a pot of gold at the end of every rainbow. Here's a fun way to perform the long division algorithm!

Divisor 2 | 3 4 Dividend

Starting with a traditional long division problem...

1

2 | 3 4

Division Dietrich guesses the 2-tablet will dissolve into the 3-liquid 1 time.

1

2 | 3 4

2

Multiplication Morris tests the guess by magnifying $1 \times 2 = 2$ creating the first rainbow arc.

1

2 | 3 4

2

1

Subtraction Sam steals the gold pot with 2 in it from the 3-liquid, leaving a remainder of 1-liquid.

1

2 | 3 4

2

1 4

Rainbows need rain, so 4 rains down to replenish the 1-liquid.

1 7

2 | 3 4

2

1 4

Dietrich guesses the 2-tablet will dissolve into the 14-liquid 7 times.

1 7

2 | 3 4

2

1 4

1 4

Morris tests the guess by magnifying $7 \times 2 = 14$ creating another rainbow arc.

1 7

2 | 3 4

2

1 4

1 4

0

Quotient

Sam steals 14 from 14 leaving no liquid.

1 7

3 | 4 5

3

Your turn!
Fill in the missing items.

BrainAid A cloud DMS the light then it Rains!
Do Division, Multiplication, Subtraction, RAin. Repeat.
Of the four basics ops, long division does *not* use Addition.

To Check Your Answer
Multiply tablet (divisor) times answer (quotient) to get liquid (dividend); e.g., $3 \times 15 = 45$.