

Decimal Division Mission

Use the standard algorithm to find each quotient.

GRADE 5 • TEKS 5.3.G

5.3.G "solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm;"

NAME _____

DATE _____

LINE UP THE DECIMAL

Place the decimal point in your quotient directly above the decimal point in the dividend. Then divide one place value at a time, writing a 0 in the quotient when the divisor cannot go into the current amount.

WORKED EXAMPLE

$$7.56 \div 18$$

1. Set up $7.56 \div 18$. Write 0 in the ones place and place the decimal point in the quotient above the dividend's decimal point.
2. 18 goes into 75 tenths 4 times. Write 4; $4 \times 18 = 72$ tenths, leaving 3 tenths.
3. Bring down 6 hundredths. 18 goes into 36 hundredths 2 times.
4. Check: $18 \times 0.42 = 7.56$.

Answer: 0.42

PRACTICE 6 problems

1 $4.68 \div 12$

ANSWER _____

2 $9.45 \div 15$

ANSWER _____

3 $16.8 \div 24$

ANSWER _____

4 $23.75 \div 25$

ANSWER _____

5 $38.4 \div 32$

ANSWER _____

6 $62.37 \div 33$

ANSWER _____

APPLY IT Show your work

- 1** A craft club has 17.64 yards of cord. It cuts the cord equally among 28 keychain kits. How many yards of cord go in each kit?

WORK SPACE

ANSWER _____

- 2** An esports club records 46.8 minutes of tournament highlights and splits them equally into 26 short clips. How many minutes long is each clip?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Find $96.48 \div 48$. Use the standard algorithm. Explain why you must write a 0 in the tenths place of the quotient.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	4.68 / 12	0.39
2	9.45 / 15	0.63
3	16.8 / 24	0.70
4	23.75 / 25	0.95
5	38.4 / 32	1.20
6	62.37 / 33	1.89

PART 2 • APPLY IT

1. **0.63 yard per kit** Divide 17.64 by 28. The quotient is 0.63 because $28 \times 0.63 = 17.64$.
2. **1.80 minutes** Divide 46.8 by 26. The quotient is 1.80 because $26 \times 1.80 = 46.8$.

CHALLENGE

2.01; after 48 goes into 96 two times, it goes into 4 tenths zero times, so write 0 in the tenths place before bringing down 8 hundredths.

Accept equivalent decimal forms, including 0.7 for 0.70, 1.2 for 1.20, and 1.8 for 1.80. Check that students place the quotient decimal point directly above the dividend decimal point.