

Divide and Conquer

Use place value to find whole-number quotients.

GRADE 5 • 5.NBT.B.6

CCSS.Math.Content.5.NBT.B.6 "Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division..."

NAME _____

DATE _____

SPLIT INTO FRIENDLY PARTS

Use place value to split a dividend into parts that are easy to divide by the divisor. Find each partial quotient, add them, and check by multiplying the quotient by the divisor.

WORKED EXAMPLE

Find $936 \div 18$.

1. Split 936 into $900 + 36$.
2. $900 \div 18 = 50$ because $18 \times 50 = 900$.
3. $36 \div 18 = 2$ because $18 \times 2 = 36$.
4. $50 + 2 = 52$.

Answer: 52

PRACTICE 6 problems

1 Find $672 \div 21$.

ANSWER _____

2 Find $1,152 \div 24$.

ANSWER _____

3 Find $2,184 \div 28$.

ANSWER _____

4 Find $3,315 \div 39$.

ANSWER _____

5 Find $2,730 \div 35$.

ANSWER _____

6 Find $4,032 \div 42$.

ANSWER _____

APPLY IT Show your work

- 1** At art club, 1,536 beads are shared equally among 32 students. How many beads does each student get?

WORK SPACE

ANSWER _____

- 2** A game club sorts 2,856 trading cards equally into 34 binders. How many cards go in each binder?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Find $3,818 \div 46$. Explain your reasoning using equations or partial quotients.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Find $672 \div 21$.	32
2	Find $1,152 \div 24$.	48
3	Find $2,184 \div 28$.	78
4	Find $3,315 \div 39$.	85
5	Find $2,730 \div 35$.	78
6	Find $4,032 \div 42$.	96

PART 2 • APPLY IT

1. **48 beads** Divide 1,536 by 32. Since $32 \times 48 = 1,536$, each student gets 48 beads.
2. **84 cards** Divide 2,856 by 34. Since $34 \times 84 = 2,856$, each binder holds 84 cards.

CHALLENGE

83; $46 \times 80 = 3,680$ and $46 \times 3 = 138$. Then $3,680 + 138 = 3,818$, so $3,818 \div 46 = 83$.

Accept correct quotient checks using multiplication and valid partial-quotient, equation, or area-model work. For the challenge, accept any clear explanation showing that 46×83 equals 3,818.