LESSON MAKER PRO

Divide and Check

Use partial quotients to divide whole numbers.

GRADE 6 · 6.NOS.B.2.b

6.NOS.B.2.b "Use strategies (e.g., partial quotients, inverse relationship between multiplication and division) to divide."

NAME _____ DATE _____

THE BIG IDEA

To divide, subtract a large multiple of the divisor, then divide what remains. Add the partial quotients to find the answer, and multiply to check it.

WORKED EXAMPLE

Divide 864 by 27.

1. 27 × 30 = 810
2. 864 - 810 = 54
3. 27 × 2 = 54
4. 30 + 2 = 32

Answer: 864 / 27 = 32

PRACTICE 6 problems

1 Use partial quotients to find 588 / 21.

ANSWER _____

2 Use partial quotients to find 756 / 18.

ANSWER _____

3 Use partial quotients to find 1,188 / 36.

ANSWER _____

4 Find 1,428 / 42. Write a multiplication equation to check your answer.

ANSWER _____

_____

5 Find 2,016 / 48. Write a multiplication equation to check your answer.

ANSWER _____

_____

6 Find 3,192 / 56. Write a multiplication equation to check your answer.

ANSWER _____

_____

APPLY IT Show your work

1 A club has 1,248 beads for 24 bracelet kits. Each kit gets the same number of beads. How many beads go in each kit?

WORK SPACE

ANSWER _____

2 A game server awards 2,340 coins equally to 36 players. How many coins does each player get?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A student divides 2,736 by 48. They subtract 48 × 50 = 2,400, leaving 336. They say the quotient is 50. Explain what they missed and find the correct quotient.

WORK SPACE AND ANSWER

ANSWER KEY

Divide and Check

GRADE 6 · 6.NOS.B.2.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use partial quotients to find 588 / 21.	**28**
2	Use partial quotients to find 756 / 18.	**42**
3	Use partial quotients to find 1,188 / 36.	**33**
4	Find 1,428 / 42. Write a multiplication equation to check your answer.	**34; 42 × 34 = 1,428**
5	Find 2,016 / 48. Write a multiplication equation to check your answer.	**42; 48 × 42 = 2,016**
6	Find 3,192 / 56. Write a multiplication equation to check your answer.	**57; 56 × 57 = 3,192**

PART 2 · APPLY IT

1. **52 beads** 24 × 50 = 1,200, leaving 48 beads. Since 24 × 2 = 48, each kit gets 50 + 2 = 52 beads.
2. **65 coins** 36 × 60 = 2,160, leaving 180 coins. Since 36 × 5 = 180, each player gets 60 + 5 = 65 coins.

CHALLENGE

The student missed 7 more groups of 48 because 336 / 48 = 7. The quotient is 50 + 7 = 57.

Accept any correct partial-quotient breakdown. For the multiplication checks, accept either order of the factors.