LESSON MAKER PRO

Blank Number Detectives

Build equations to find hidden whole numbers.

GRADE 5 · MA.5.AR.2.4

MA.5.AR.2.4 "Given a mathematical or real-world context, write an equation involving any of the four operations to determine the unknown whole number with the unknown in any position."

NAME _____ DATE _____

FIND THE UNKNOWN

An equation shows that two amounts are equal. Use ___ for the unknown number, then use the opposite operation to find it. Check by putting your answer back into the equation.

WORKED EXAMPLE

A number divided by 4 is 9. Write an equation and solve.

1. Write: ___ / 4 = 9.
2. Multiply 9 by 4.
3. 9 * 4 = 36.

Answer: ___ = 36

PRACTICE 6 problems

1 Start with a number. Add 27. The sum is 65. Write an equation using ___, then solve.

ANSWER _____

2 Subtract a number from 84. The difference is 29. Write an equation using ___, then solve.

ANSWER _____

3 Subtract 18 from a number. The difference is 47. Write an equation using ___, then solve.

ANSWER _____

4 Seven equal groups have 56 items altogether. Write an equation using ___ for the number of items in each group, then solve.

ANSWER _____

5 A number divided by 6 is 12. Write an equation using ___, then solve.

ANSWER _____

6 Ninety-six divided by a number is 16. Write an equation using ___, then solve.

ANSWER _____

APPLY IT Show your work

1 The art club puts 135 beads equally into 5 supply cups. How many beads go in each cup? Write an equation using ___, then solve.

WORK SPACE

ANSWER _____

2 At a game arcade, Priya has 178 tickets. She needs 250 tickets to choose a prize. How many more tickets does she need? Write an equation using ___, then solve.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A coding club has 92 badges. It gives 14 badges to new members, then shares the rest equally among 6 teams. How many badges does each team receive? Write an equation using ___, then solve.

WORK SPACE AND ANSWER

ANSWER KEY

Blank Number Detectives

GRADE 5 · MA.5.AR.2.4

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Start with a number. Add 27. The sum is 65. Write an equation using ___, then solve.	**___ + 27 = 65; ___ = 38**
2	Subtract a number from 84. The difference is 29. Write an equation using ___, then solve.	**84 - ___ = 29; ___ = 55**
3	Subtract 18 from a number. The difference is 47. Write an equation using ___, then solve.	**___ - 18 = 47; ___ = 65**
4	Seven equal groups have 56 items altogether. Write an equation using ___ for the number of items in each group, then solve.	**7 * ___ = 56; ___ = 8**
5	A number divided by 6 is 12. Write an equation using ___, then solve.	**___ / 6 = 12; ___ = 72**
6	Ninety-six divided by a number is 16. Write an equation using ___, then solve.	**96 / ___ = 16; ___ = 6**

PART 2 · APPLY IT

1. **135 / 5 = ___; ___ = 27** Divide 135 by 5 to find the number of beads in one cup. Each cup gets 27 beads.
2. **178 + ___ = 250; ___ = 72** Subtract 178 from 250 to find the missing number of tickets. Priya needs 72 more tickets.

CHALLENGE

6 * ___ + 14 = 92; ___ = 13

Accept equivalent equations that correctly show the situation and lead to the same whole-number answer. For the challenge, accept 92 - 14 = 6 * ___ or an equivalent equation.