

REMEMBER

Write one of the vocabulary words from the word bank that best replaces the given word(s).

A operation is an operation that can undo
(backwards)

another operation, such as addition and
(backwards addition)

Since multiplication is just repeated addition, then it must also have a

reverse operation:
(repeated subtraction)

Word Bank

Division

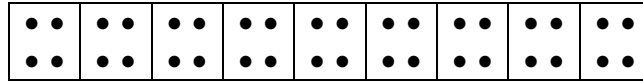
Reverse

Subtraction

UNDERSTAND

Answer the following questions to check for understanding.

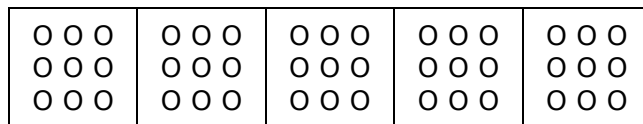
- 1** What multiplication problem and division problem does this model represent?



.....	○	=
Amount in each group	Times	Number of groups		Total Product

.....	○	=
(Dividend) Total Amount	Divided by	(Divisor) Number of groups		(Quotient) Number in each

- 2** What multiplication problem and division problem does this model represent?



.....	○	=
Amount in each group	Times	Number of groups		Total Product

.....	○	=
(Dividend) Total Amount	Divided by	(Divisor) Number of groups		(Quotient) Number in each

APPLY

Read the directions to apply your mathematical knowledge into skills.

Solve each quotient and explain by using a multiplication fact.

1 $18 \div 2 = \dots\dots\dots$,
because...

2 $25 \div 5 = \dots\dots\dots$,
because...

2 $24 \div 3 = \dots\dots\dots$,
because...

ADVANCED

A1 $56 \div 7 = \dots\dots\dots$,
because...

A2 $96 \div 12 = \dots\dots\dots$,
because...

ANALYZE

Analyze each problem to determine the best strategies to solve it.

- 1** Demi has 10 flowers to place into 2 vases. She wants to put the same number of flowers into each vase.

How many flowers should in each vase?

- A** 12, because $10 + 2 = 12$
- B** 20, because $10 \times 2 = 20$
- C** 5, because $2 \times 5 = 10$
- D** 8, because $10 - 2 = 8$

- 2** Demi has 40 flowers to place into 8 vases. She wants to put the same number of flowers into each vase.

How many flowers should in each vase?

- A** 32, because $40 - 8 = 32$
- B** 48, because $40 + 8 = 48$
- C** 5, because $8 \times 5 = 40$
- D** 320, because $40 \times 8 = 320$

ADVANCED

- A1** Demi has 72 flowers to place into 8 vases. She wants to put the same number of flowers into each vase.

How many flowers should in each vase?

- A** 80, because $72 + 8 = 80$
- B** 9, because $8 \times 9 = 72$
- C** 64, because $72 - 8 = 64$
- D** 576, because $72 \times 8 = 576$

EVALUATE

Identify and explain each student's error.

Student 1 $18 \div 2 = 16$,
because...
 $18 - 2 = 16$

Error:

Student 2 $25 \div 5 = 125$,
because...
 $25 \times 5 = 125$

Error:

ADVANCED

Student A1 $96 \div 12 = 9$,
because...
 $12 \times 9 = 96$

Error:

CREATE

Use your knowledge and skills to perform the task.

The phrase, "It's cheaper by the dozen," means that things costs less if you buy in larger amounts (though not necessarily in dozens).

Imagine you need to buy 48 bottles of water for a tennis tournament.

1. Determine how many of each size pack of water bottles you would need to have enough for the tournament.
2. Determine the cost of buying the packs of bottles of water for each size.
3. Determine which size pack of bottles of water you would buy, and explain why.

CHEAPER BY THE DOZEN

Number of Water Bottles Per Pack	Cost of Pack of Water Bottles	Number of Packs Needed for the Tournament	Total Cost of Packs of Water Bottles
4-Pack	\$5		
6-Pack	\$6		
8-Pack	\$7		
12-Pack	\$8		

At these prices, I would buy packs of the - pack of water bottles, because...