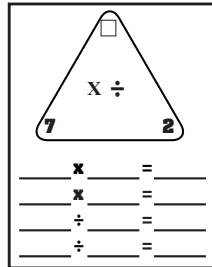
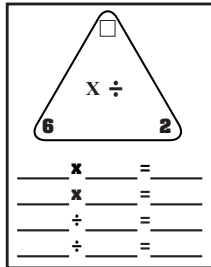
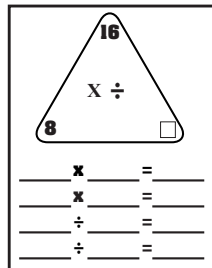
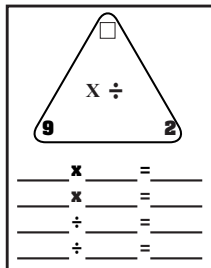


DIVIDING by HALF

WORK BOOKLET ANSWER KEY

TRIANGLE FACT FAMILY



Division Vocabulary

dividend divisor quotient

$$12 \div 6 = 2$$

divisor 6 $\overline{)12}$ 2 quotient
dividend

dividend 12 quotient
divisor 6 = 2

DIVISION

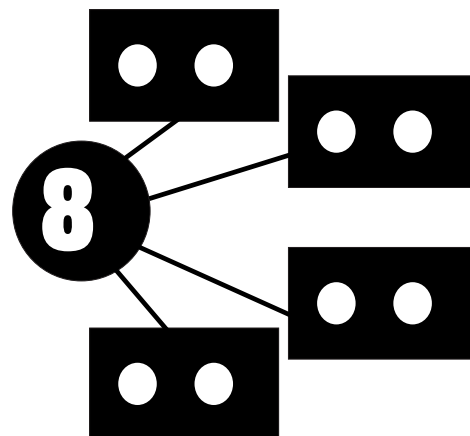
$$14 \div 7 = 2$$



DIVIDEND DIVISOR QUOTIENT

Division Strategies:

PARTITION

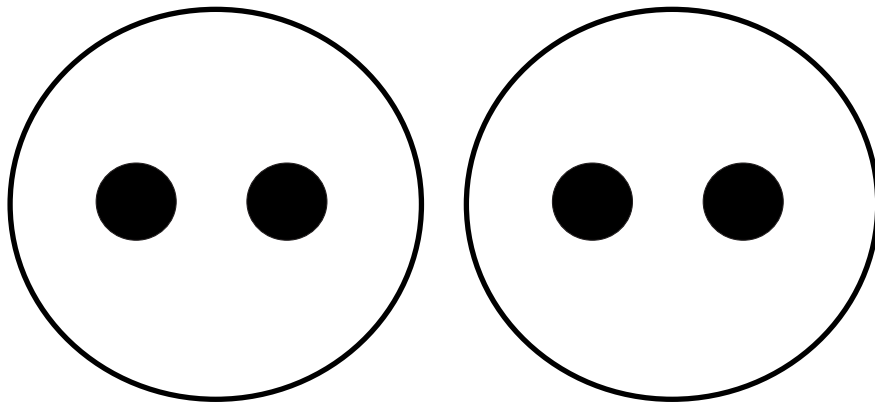


$$8 \div 4 = 2$$

STRATEGY POSTER

**When dividing by HALF,
it's always 2**

$$4 \div 2 = 2$$



**Hint: It's always 2 when you divide a
number in half.**

DIVISION

$$14 \div 7 = 2$$



DIVIDEND

DIVISOR

QUOTIENT

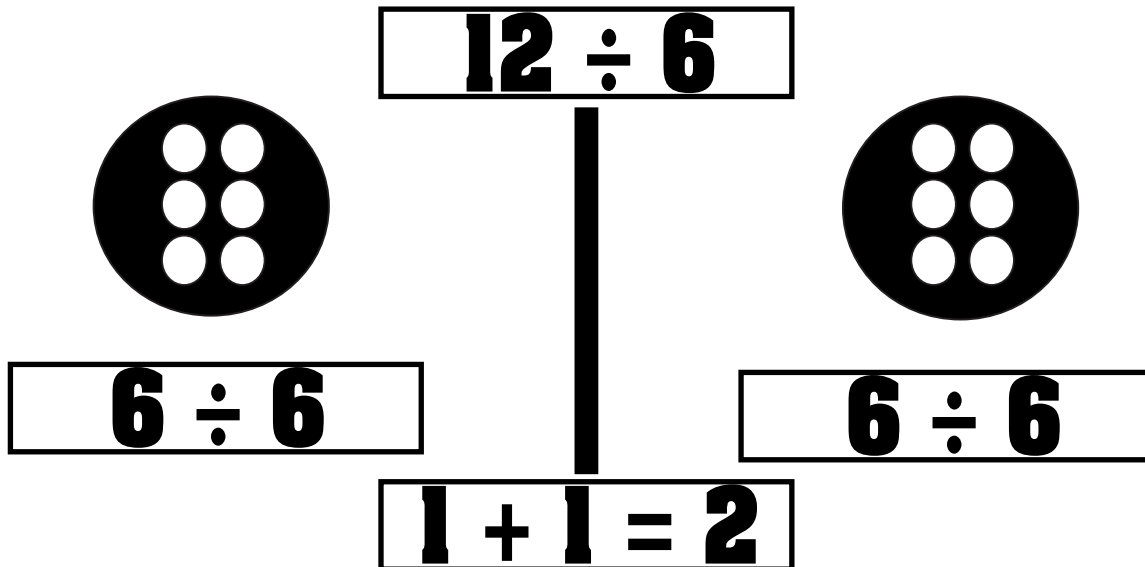


VOCABULARY

DISTRIBUTIVE PROPERTY

The bakery made 12 muffins. They put 6 in a box. How many boxes did they use?

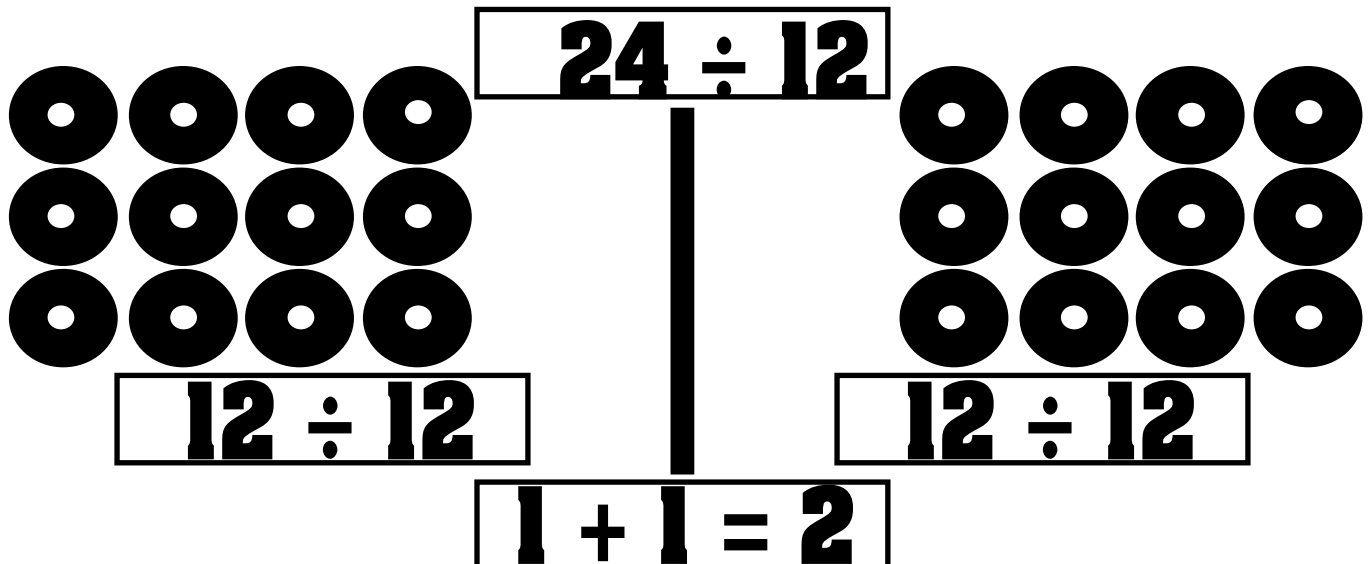
$$12 \div 6 = (6 \div 6) + (6 \div 6) = 1 + 1 = 2$$



MODEL THE FACT

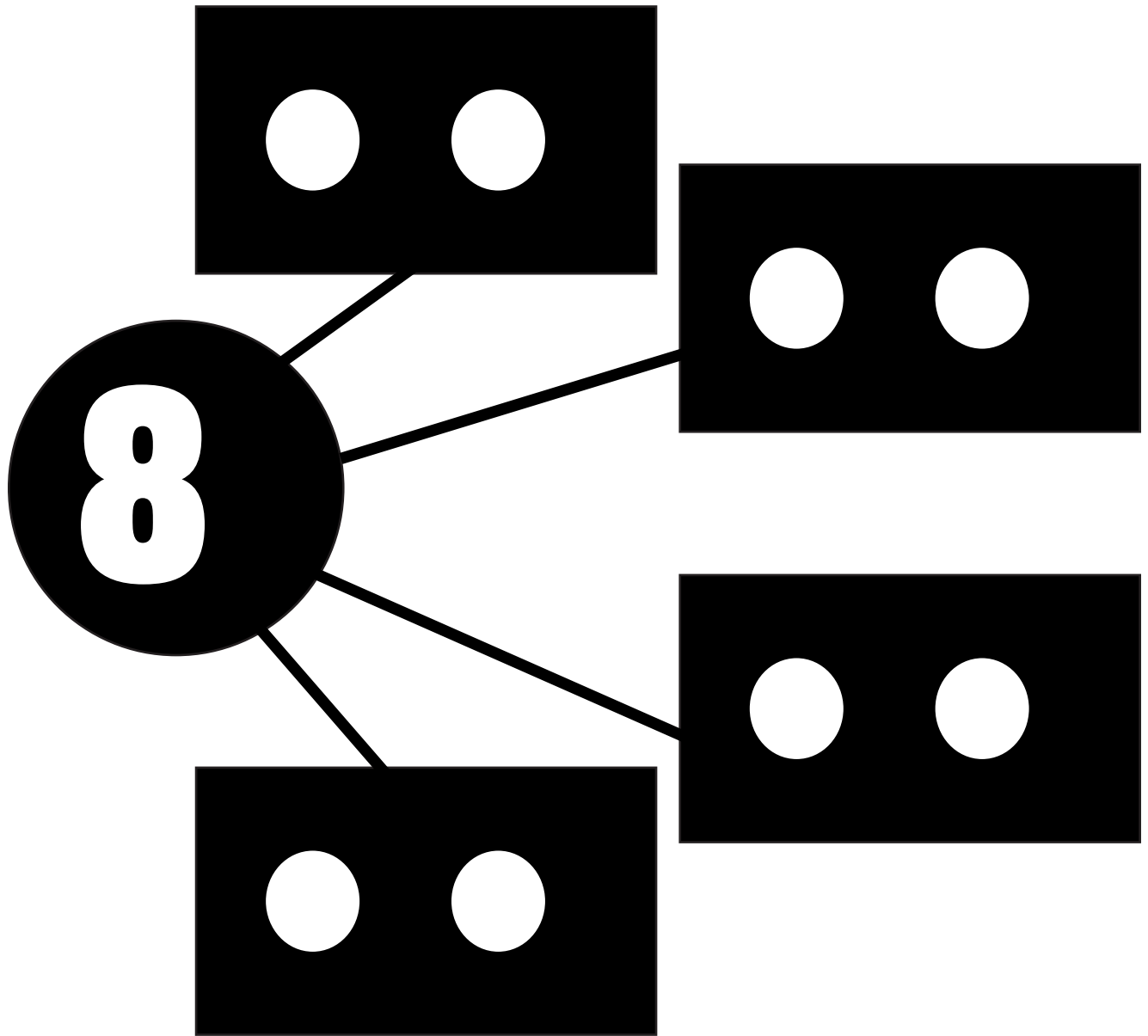
The bakery made 24 muffins. They put 12 in a box. How many boxes did they use?

$$24 \div 12 = (12 \div 12) + (12 \div 12) = 1 + 1 = 2$$



Division Strategies:

PARTITION

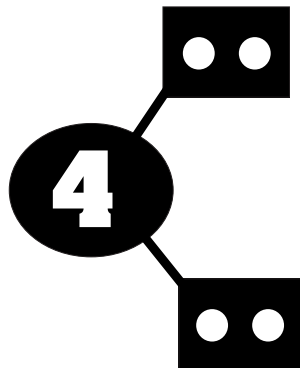


$$8 \div 4 = 2$$

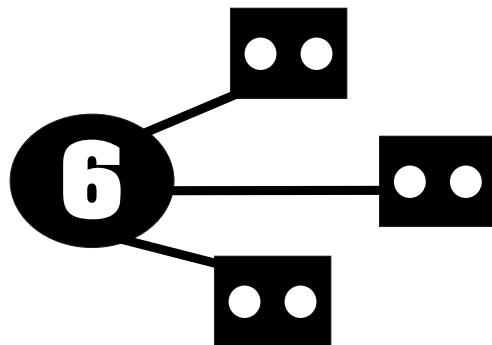
Division Strategies:

PARTITION

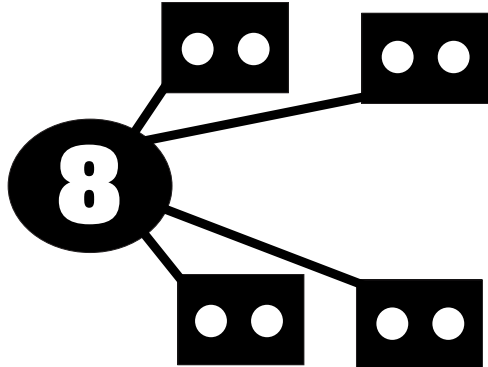
$$4 \div 2 = 2$$



$$6 \div 3 = 2$$



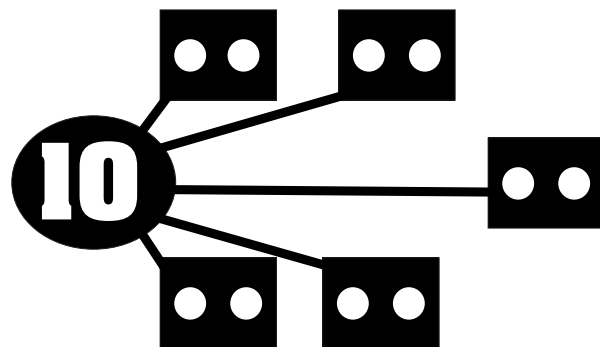
$$8 \div 4 = 2$$



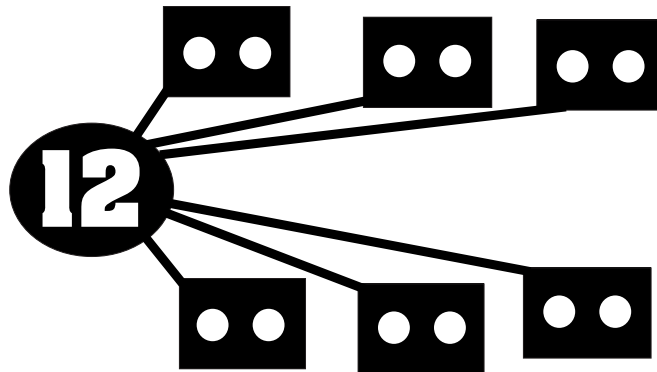
Division Strategies:

PARTITION

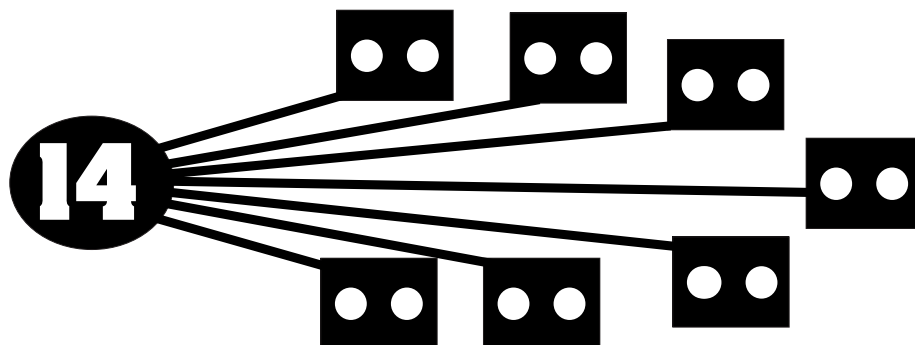
$$10 \div 5 = 2$$



$$12 \div 6 = 2$$



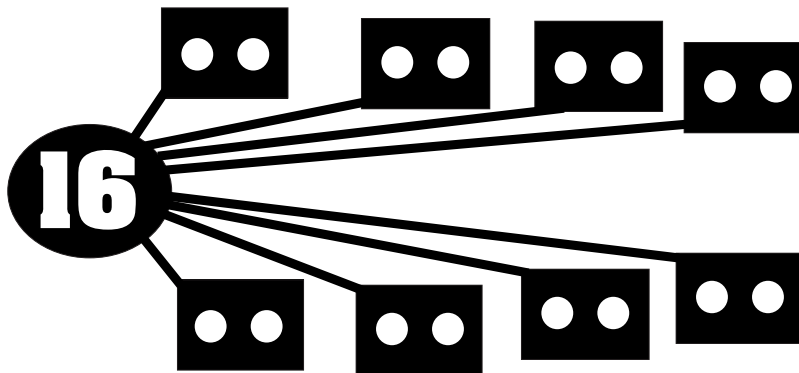
$$14 \div 7 = 2$$



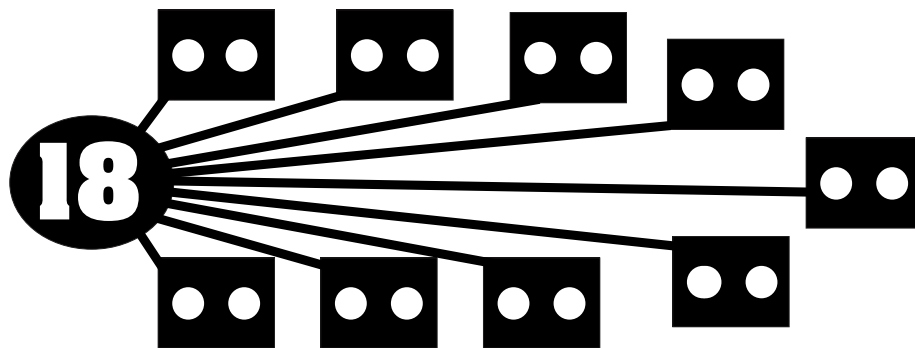
Division Strategies:

PARTITION

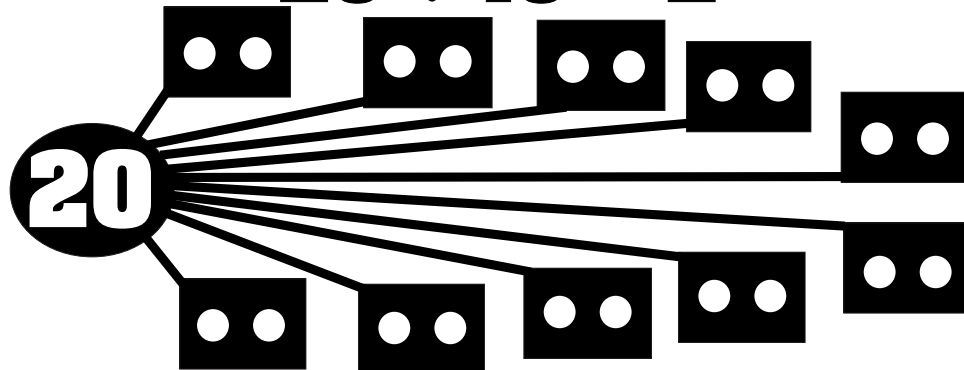
$$16 \div 8 = 2$$



$$18 \div 9 = 2$$



$$20 \div 10 = 2$$



Division Strategies:

PARTITION

FREE CHOICE

FREE CHOICE

FREE CHOICE

Division Strategies:

RELATED FACT

$$18 \div 9 = \underline{2}$$

think

$$9 \times \underline{2} = 18$$

$$6 \div 3 = \underline{2}$$

think

$$3 \times \underline{2} = 6$$

$$14 \div 7 = \underline{2}$$

think

$$7 \times \underline{2} = 14$$

$$10 \div 5 = \underline{2}$$

think

$$5 \times \underline{2} = 10$$

Division str tegies:

RELATED FACT

$$4 \div 2 = \underline{2}$$

think

$$2 \times \underline{2} = 4$$

$$12 \div 6 = \underline{2}$$

think

$$6 \times \underline{2} = 12$$

$$16 \div 8 = \underline{2}$$

think

$$8 \times \underline{2} = 16$$

$$8 \div 4 = \underline{2}$$

think

$$4 \times \underline{2} = 8$$

Division Strategies:

RELATED FACT

$$20 \div 10 = \underline{2}$$

think

$$10 \times \underline{2} = 20$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

think

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

think

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

think

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

Division Strategies:

REPEATED SUBTRACTION

$$16 \div 8 = ?$$

$$16 - 8 = 8$$
$$8 - 8 = 0$$

$$16 \div 8 = \boxed{2}$$

Division Strategies: **REPEATED SUBTRACTION**

$$10 \div 5 = ?$$

$$10 - 5 = 5$$
$$5 - 5 = 0$$

$$10 \div 5 = \boxed{2}$$

Division Strategies:

REPEATED SUBTRACTION

$$6 \div 3 = ?$$

$$\begin{array}{r} 6 - 3 = 3 \\ 3 - 3 = 0 \end{array}$$

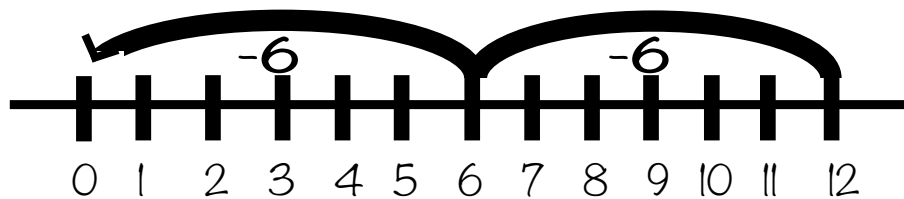
$$6 \div 3 = \boxed{2}$$

Division Strategies:

NUMBER LINES

THERE ARE 12 COOKIES AND YOU PUT 6 IN A BAG. HOW MANY BAGS DO YOU HAVE?

$$12 \div 6 = 2$$



HOW MANY JUMPS UNTIL YOU GET TO ZERO?

THE FIRST NUMBER IS HOW MANY COOKIES (DIVIDEND). THE SECOND NUMBER IS HOW MANY ARE IN A BAG (DIVISOR). THE QUESTION IS HOW MANY BAGS DO YOU NEED (QUOTIENT)?

SOLVE THE PROBLEM ON THE NUMBER LINE.
HOW MANY JUMPS UNTIL YOU GET TO ZERO?

$$4 \div 2$$



$$6 \div 3$$



$$8 \div 4$$



$$10 \div 5$$



Division Strategies:

NUMBER LINES

$12 \div 6$



$14 \div 7$



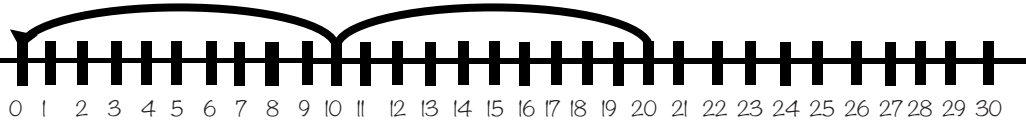
$16 \div 8$



$18 \div 9$



$20 \div 10$



Division Vocabulary

dividend

divisor

quotient

$$12 \div 6 = 2$$

divisor

6

12

2

quotient

dividend

dividend

12

= 2

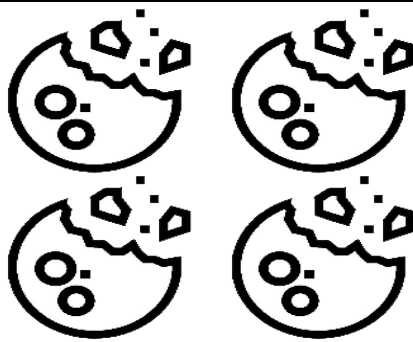
quotient

divisor

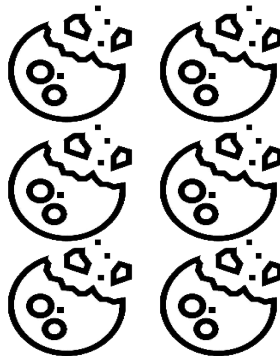
6

Array Flashcards

USE THE MODEL TO SOLVE



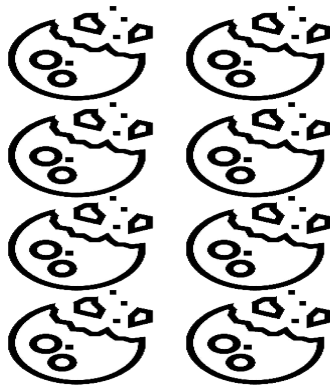
$$4 \div 2 = 2$$



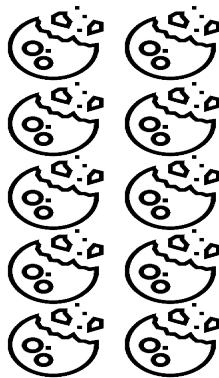
$$6 \div 3 = \underline{2}$$

Array Flashcards

USE THE MODEL TO SOLVE



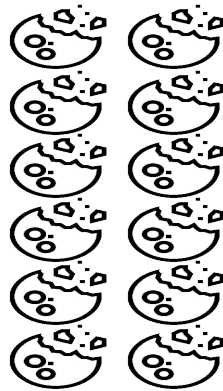
$$8 \div 4 = \underline{2}$$



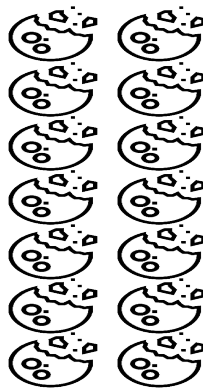
$$10 \div 5 = \underline{2}$$

Array Flashcards

USE THE MODEL TO SOLVE



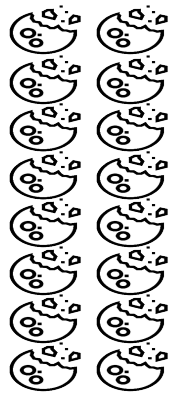
$$12 \div 6 = \underline{2}$$



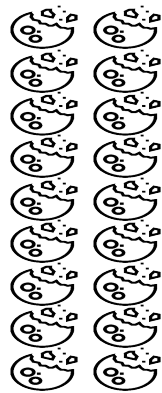
$$14 \div 7 = \underline{2}$$

Array Flashcards

USE THE MODEL TO SOLVE



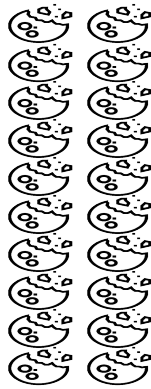
$$16 \div 8 = \underline{2}$$



$$18 \div 9 = \underline{2}$$

Array Flashcards

USE THE MODEL TO SOLVE



$$20 \div 10 = \underline{2}$$

FREE CHOICE

Array Flashcards

**WRITE AN EQUATION THAT
MATCHES THE ARRAY.**

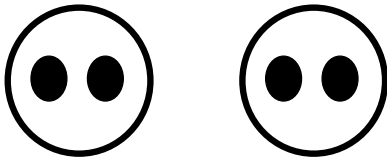
FREE CHOICE

FREE CHOICE

Equal Group Flashcards

MAKE YOUR OWN EQUAL GROUP FLASHCARDS. DRAW EQUAL GROUPS TO MODEL THE PROBLEM.

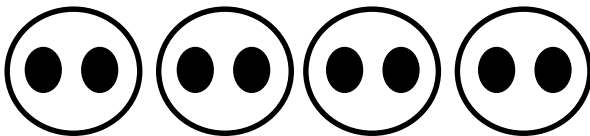
$$4 \div 2 = \underline{2}$$



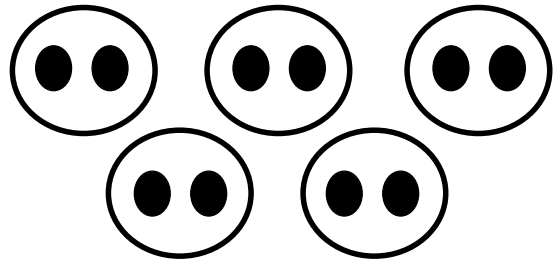
$$6 \div 3 = \underline{2}$$



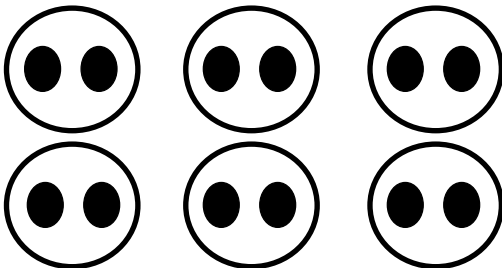
$$8 \div 4 = \underline{2}$$



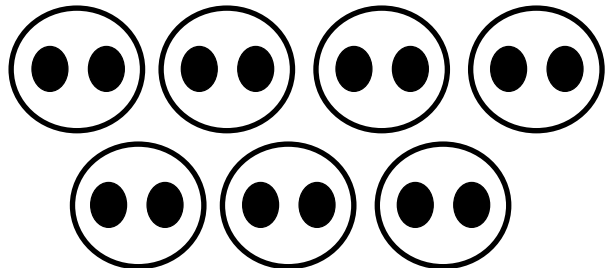
$$10 \div 5 = \underline{2}$$



$$12 \div 6 = \underline{2}$$



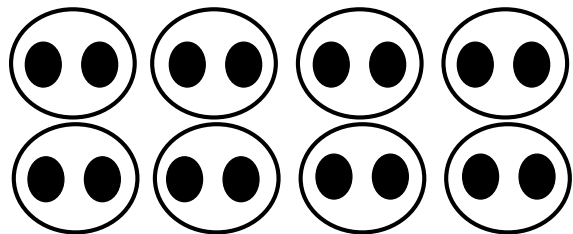
$$14 \div 7 = \underline{2}$$



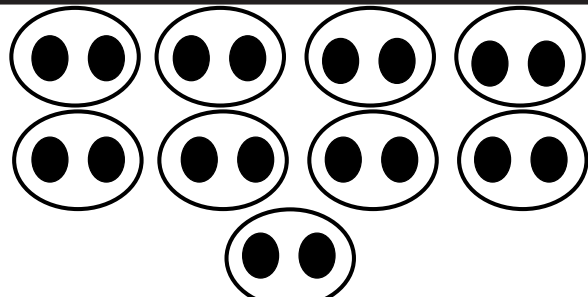
Equal Group Flashcards

MAKE YOUR OWN EQUAL GROUP FLASHCARDS. DRAW EQUAL GROUPS TO MODEL THE PROBLEM.

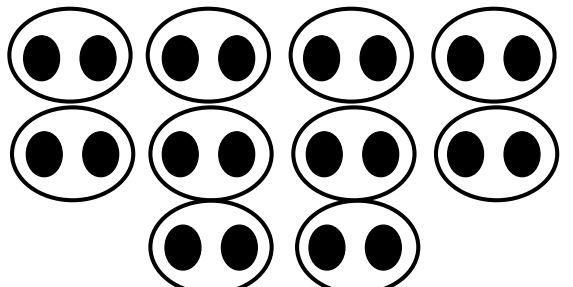
16 ÷ 8 = 2



18 ÷ 9 = 2



20 ÷ 10 = 2



Regular Flashcards

$$4 \div 2$$

$$6 \div 3$$

$$8 \div 4$$

$$10 \div 5$$

$$12 \div 6$$

$$14 \div 7$$

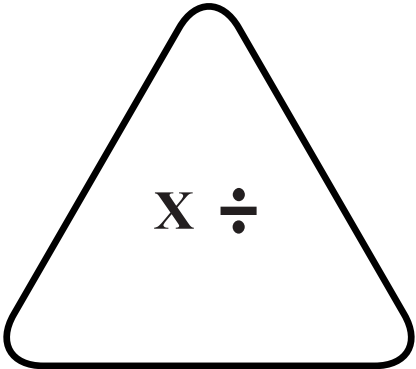
Regular Flashcards

$$16 \div 8$$

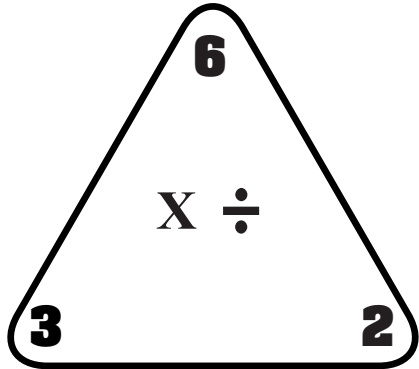
$$18 \div 9$$

$$20 \div 10$$

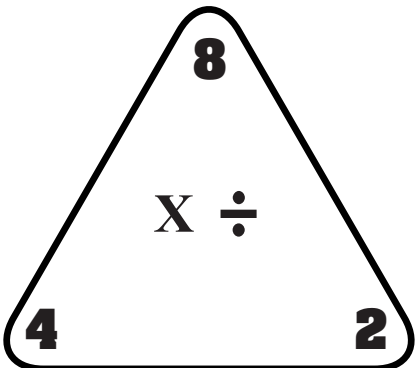
TRIANGLE FACT FAMILY



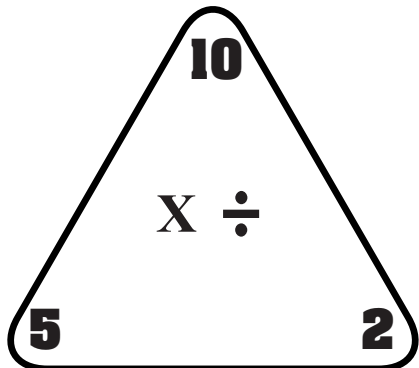
	x		=	
	x		=	
	÷		=	
	÷		=	



3	x	2	=	6
2	x	3	=	6
6	÷	2	=	3
6	÷	3	=	2



4	x	2	=	8
2	x	4	=	8
8	÷	4	=	2
8	÷	2	=	4



5	x	2	=	10
2	x	5	=	10
10	÷	2	=	5
10	÷	5	=	2

TRIANGLE FACT FAMILY

12
6 **2**
X ÷

$$\begin{array}{rcl} 6 & \times & 2 = 12 \\ 2 & \times & 6 = 12 \\ 12 & \div & 2 = 6 \\ 12 & \div & 6 = 2 \end{array}$$

14
7 **2**
X ÷

$$\begin{array}{rcl} 7 & \times & 2 = 14 \\ 2 & \times & 7 = 14 \\ 14 & \div & 2 = 7 \\ 14 & \div & 7 = 2 \end{array}$$

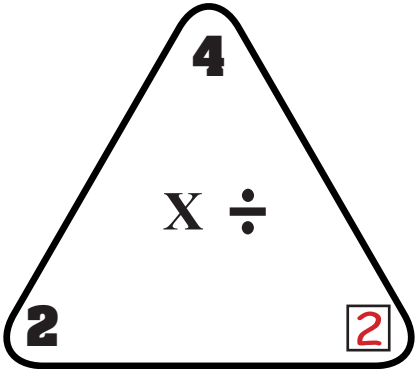
16
8 **2**
X ÷

$$\begin{array}{rcl} 8 & \times & 2 = 16 \\ 2 & \times & 8 = 16 \\ 16 & \div & 2 = 8 \\ 16 & \div & 8 = 2 \end{array}$$

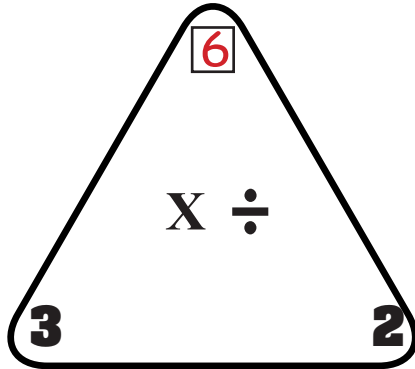
18
9 **2**
X ÷

$$\begin{array}{rcl} 9 & \times & 2 = 18 \\ 2 & \times & 9 = 18 \\ 18 & \div & 2 = 9 \\ 18 & \div & 9 = 2 \end{array}$$

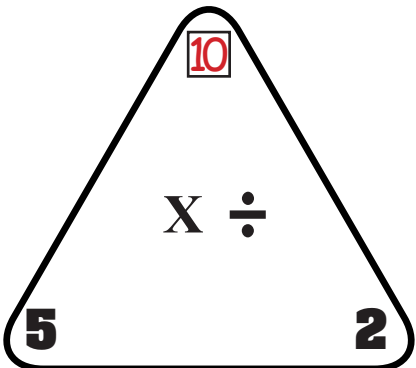
TRIANGLE FACT FAMILY



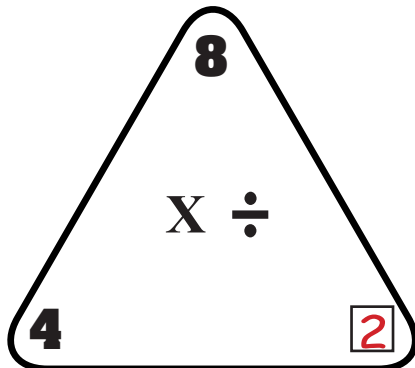
$$\begin{array}{r} 2 \times 2 = 4 \\ 2 \times 2 = 4 \\ 4 \div 2 = 2 \\ 4 \div 2 = 2 \end{array}$$



$$\begin{array}{r} 3 \times 2 = 6 \\ 2 \times 3 = 6 \\ 6 \div 2 = 3 \\ 6 \div 3 = 2 \end{array}$$



$$\begin{array}{r} 5 \times 2 = 10 \\ 2 \times 5 = 10 \\ 10 \div 2 = 5 \\ 10 \div 5 = 2 \end{array}$$



$$\begin{array}{r} 4 \times 2 = 8 \\ 2 \times 4 = 8 \\ 8 \div 4 = 2 \\ 8 \div 2 = 4 \end{array}$$

TRIANGLE FACT FAMILY

9 **x** **2** = **18**
2 **x** **9** = **18**
18 ÷ **2** = **9**
18 ÷ **9** = **2**

8 **x** **2** = **16**
2 **x** **8** = **16**
16 ÷ **2** = **8**
16 ÷ **8** = **2**

6 **x** **2** = **12**
2 **x** **6** = **12**
12 ÷ **2** = **6**
12 ÷ **6** = **2**

7 **x** **2** = **14**
2 **x** **7** = **14**
14 ÷ **2** = **7**
14 ÷ **7** = **2**

WORD PROBLEM

MODEL YOUR THINKING AND SOLVE THE PROBLEM.

THE BAKERY HAD 6 DONUTS. THEY PUT 3 IN EACH BAG. HOW MANY BAGS DID THEY USE?

$$\underline{6} \div \underline{3} = \underline{2}$$

THE BAKERY HAD 8 DONUTS. THEY PUT 4 IN EACH BAG. HOW MANY BAGS DID THEY USE?

$$\underline{8} \div \underline{4} = \underline{2}$$

THE BAKERY MADE 10 MUFFINS. THEY PACKED 5 IN A BOX. HOW MANY BOXES DID THEY USE?

$$\underline{10} \div \underline{5} = \underline{2}$$

THE BAKERY MADE 18 HAND PIES. THEY PUT 9 IN EACH BOX. HOW MANY BOXES DID THEY USE?

$$\underline{18} \div \underline{9} = \underline{2}$$

QUIZ

Follow the directions in each box. Choose an equation to represent each problem.

**I CAN SKIP COUNT TO
DIVIDE BY HALF!**

**I CAN USE EQUAL GROUPS
TO DIVIDE BY HALF!**

**I CAN USE ARRAYS TO
MODEL DIVIDING BY
HALF!**

**I CAN MODEL DIVIDING BY
HALF ON THE NUMBER
LINE!**

**I CAN USE REPEATED
SUBTRACTION TO DIVIDE BY
HALF.**

**MY STRATEGY FOR THINKING
ABOUT DIVIDING BY HALF IS....**

CERTIFICATE

★ **GREAT MATH WORK!** ★

HAS SUCCESSFULLY PRACTICED DIVIDING

BY HALF!

GREAT JOB!

TEACHER: _____ DATE: _____

Looking at the halves

$$4 \div 2 = 2$$

$$6 \div 3 = 2$$

$$8 \div 4 = 2$$

$$10 \div 5 = 2$$

$$12 \div 6 = 2$$


$$14 \div 7 = 2$$

$$16 \div 8 = 2$$

$$18 \div 9 = 2$$

$$20 \div 10 = 2$$

Bookmarks




**DIVIDING
BY
HALF**

$4 \div 2 = 2$
 $6 \div 3 = 2$
 $8 \div 4 = 2$
 $10 \div 5 = 2$
 $12 \div 6 = 2$
 $14 \div 7 = 2$
 $16 \div 8 = 2$
 $18 \div 9 = 2$
 $20 \div 10 = 2$

DIVIDING BY HALF

Hint : it's always 2 when you divide a number in half.




**DIVIDING
BY
HALF**

$4 \div 2 = 2$
 $6 \div 3 = 2$
 $8 \div 4 = 2$
 $10 \div 5 = 2$
 $12 \div 6 = 2$
 $14 \div 7 = 2$
 $16 \div 8 = 2$
 $18 \div 9 = 2$
 $20 \div 10 = 2$

DIVIDING BY HALF

Hint : it's always 2 when you divide a number in half.



**DIVIDING
BY
HALF**

$4 \div 2 = 2$
 $6 \div 3 = 2$
 $8 \div 4 = 2$
 $10 \div 5 = 2$
 $12 \div 6 = 2$
 $14 \div 7 = 2$
 $16 \div 8 = 2$
 $18 \div 9 = 2$
 $20 \div 10 = 2$

DIVIDING BY HALF

Hint : it's always 2 when you divide a number in half.