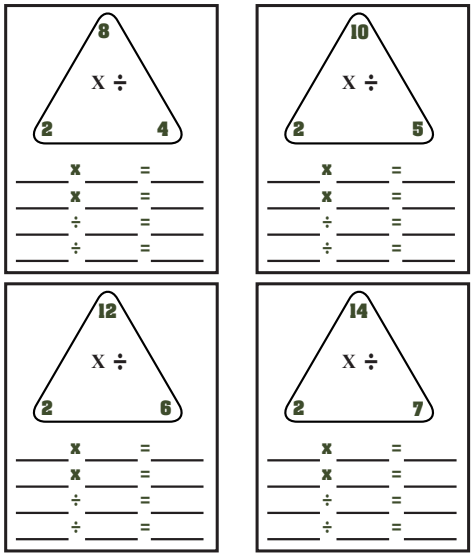
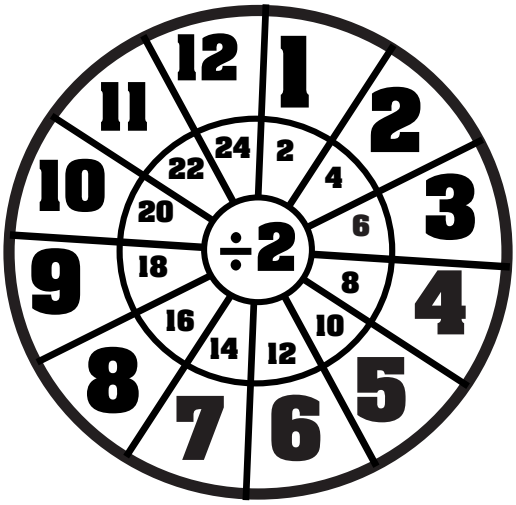
DIVIDING by 2

WORK BOOKLET

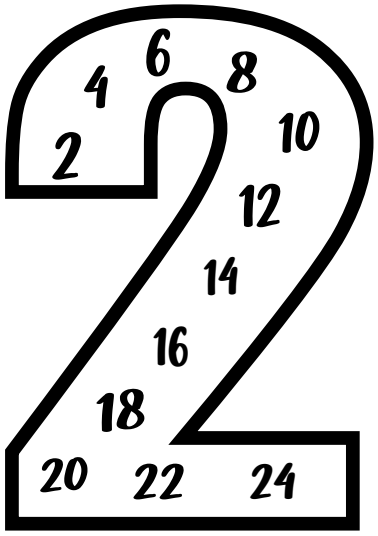
TRIANGLE FACT FAMILY



DIVISION WHEELS

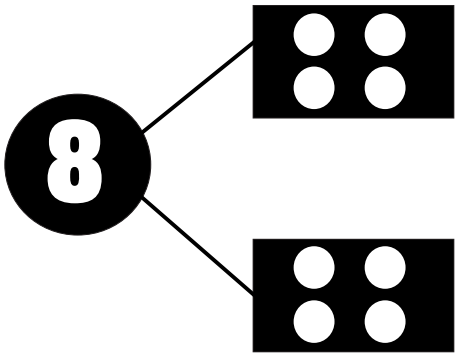


MULTIPLES OF 2



Division Strategies:

PARTITION

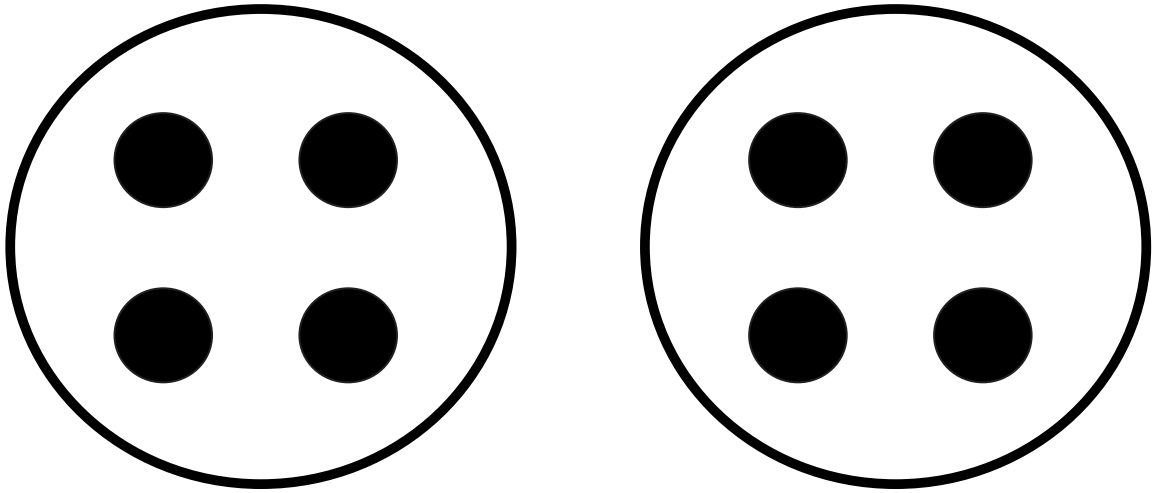


8 ÷ 2 = 4

STRATEGY POSTER

When dividing by 2, think multiplication! 2 x ? = 8

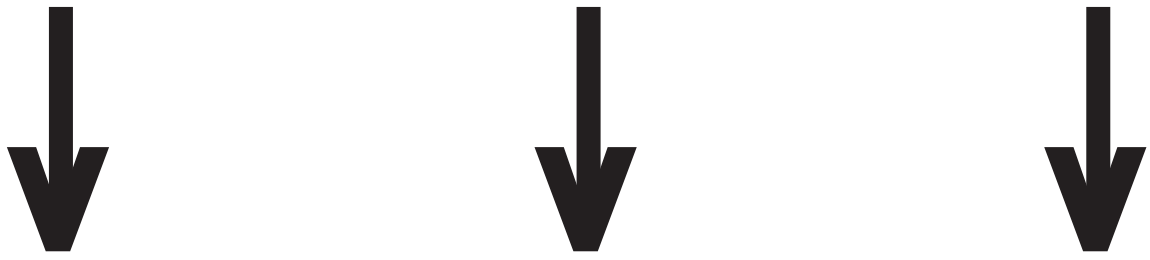
$$8 \div 2 = 4$$



Hint: Think multiplication! 2 x ? = 8

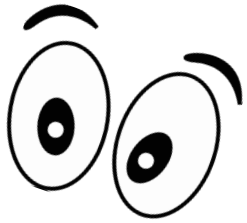
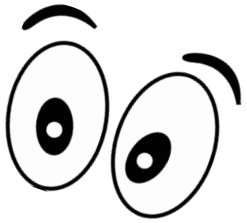
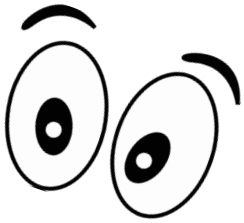
DIVISION

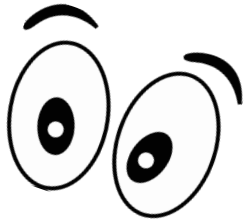
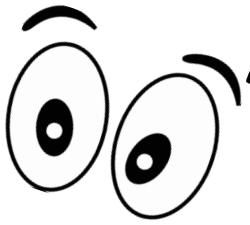
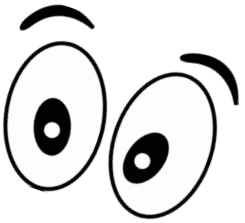
$$16 \div 2 = 8$$

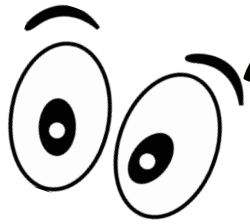
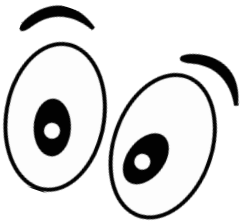


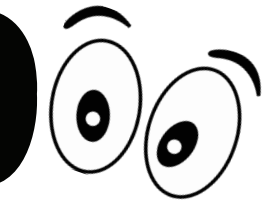
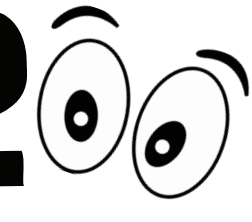
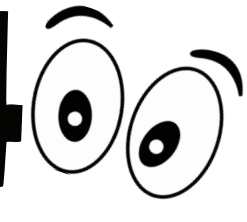
DIVIDEND DIVISOR QUOTIENT

MULTIPLES OF TWO

2  4  6 

8  10  12 

14  16  18 

20  22  24 

MULTIPLES OF TWO

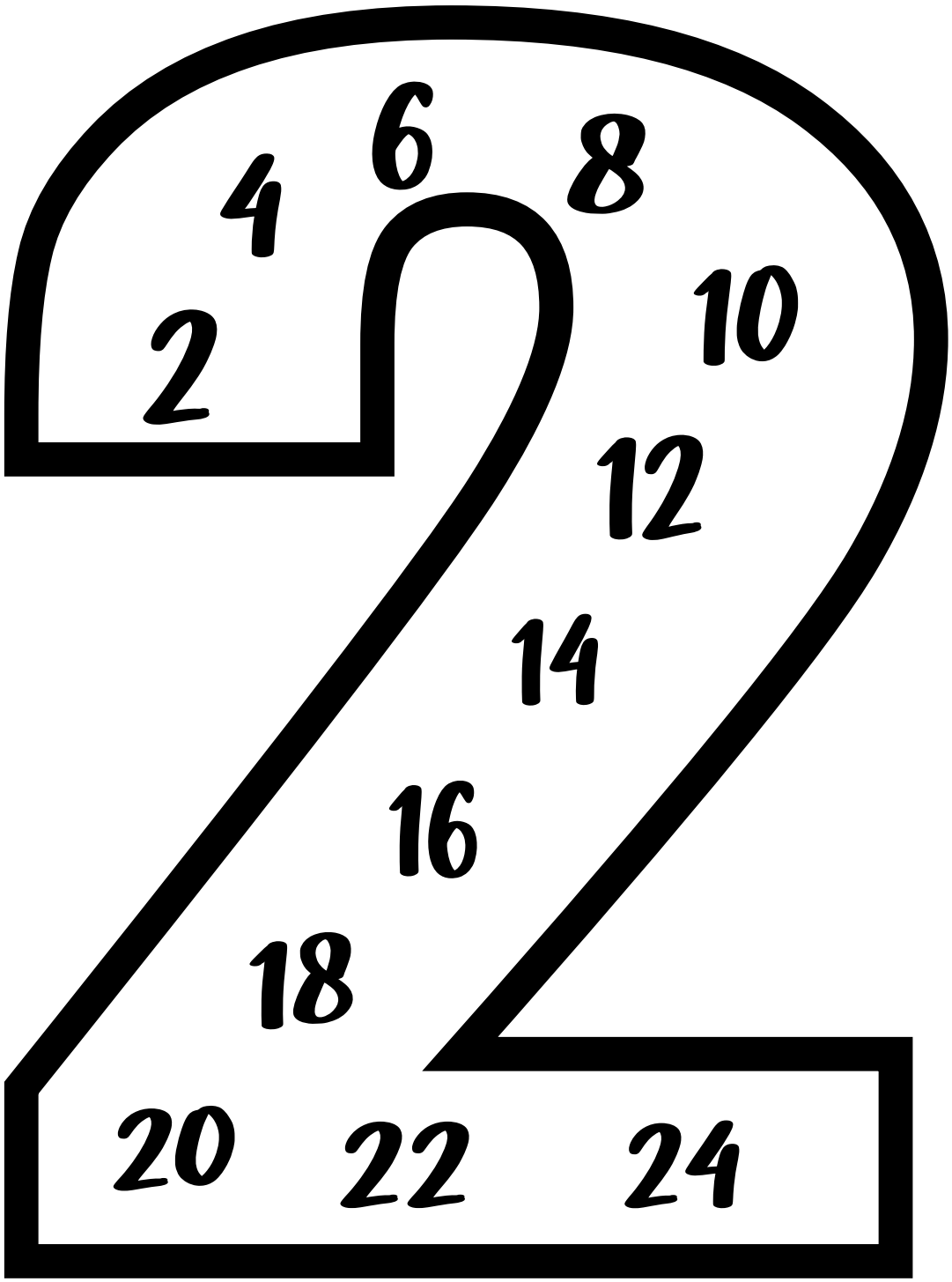
2  4  6 

8  10  12 

14  16  18 

20  22  24 

MULTIPLES OF 2

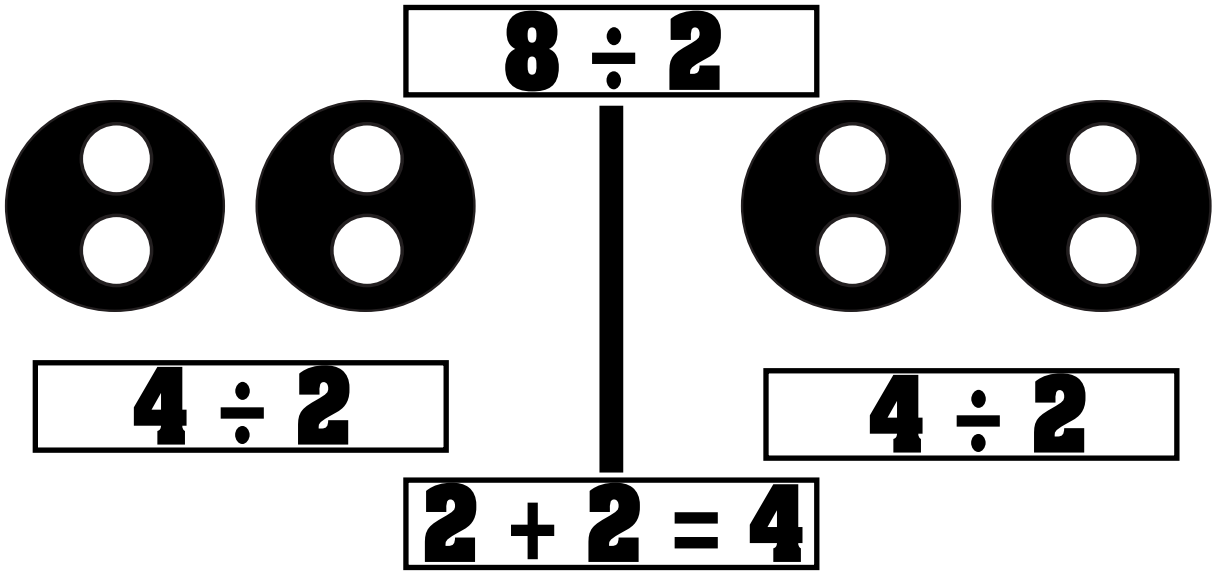


VOCABULARY

DISTRIBUTIVE PROPERTY

There were 8 marbles. I put 2 in each bag. How many bags did I use?

$$8 \div 2 = (4 \div 2) + (4 \div 2) = 2 + 2 = 4$$



MODEL THE FACT

There were 12 marbles. I put 2 in each bag. How many bags did I use?

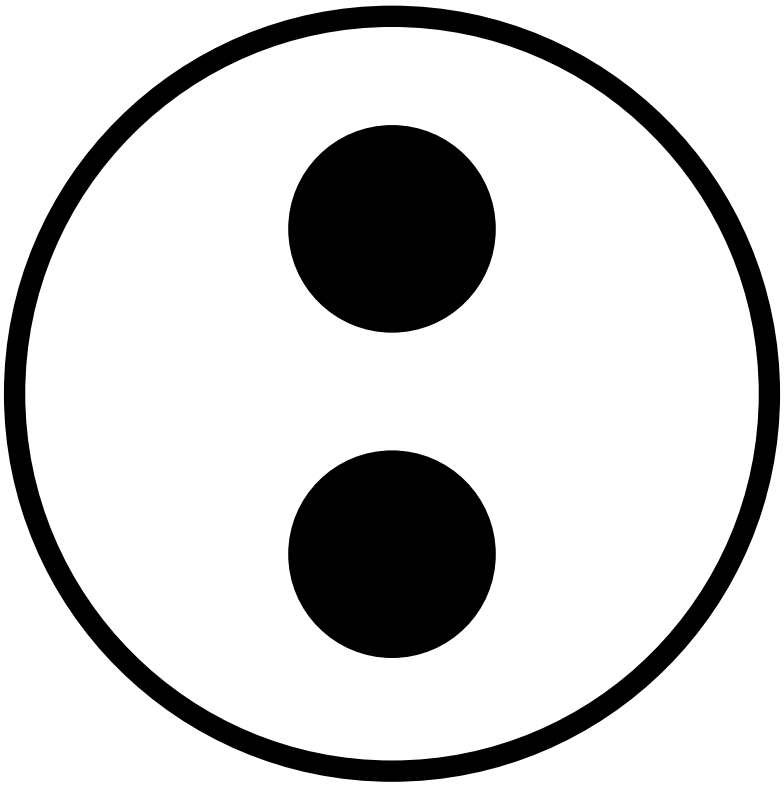
$$12 \div 2 = (6 \div 2) + (6 \div 2)$$

IDENTITY PROPERTY

DIVIDING A NUMBER BY 1

$$2 \div 1 = 2$$

$10 \div 1$ $5 \div 1$ $7 \div 1$



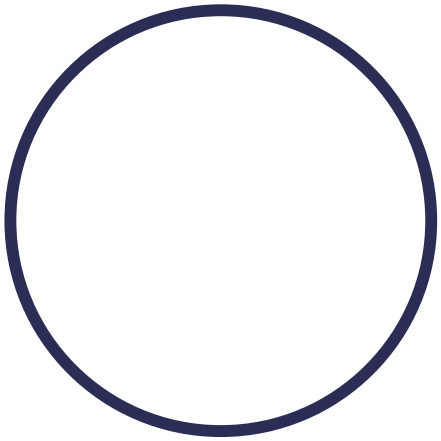
Hint : It's always the number when you divide by 1.

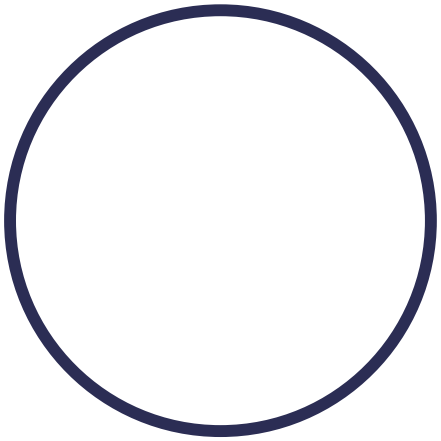
ZERO PROPERTY

DIVIDING 0 BY A NUMBER

$$0 \div 2 = 0$$

$0 \div 8$ $0 \div 1$ $0 \div 2$





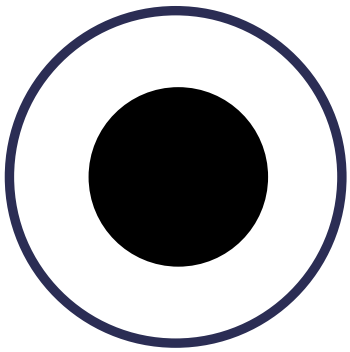
Hint: It's always 0 when you divide zero by a number.

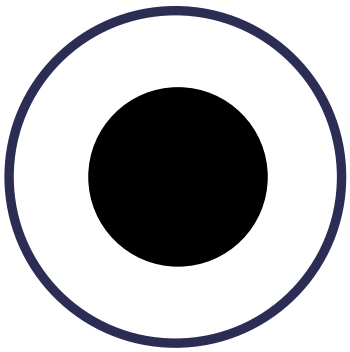
DIVISION BY ITSELF PROPERTY

DIVIDING A NUMBER BY ITSELF

$$2 \div 2 = 1$$

$10 \div 10$ $5 \div 5$ $8 \div 8$

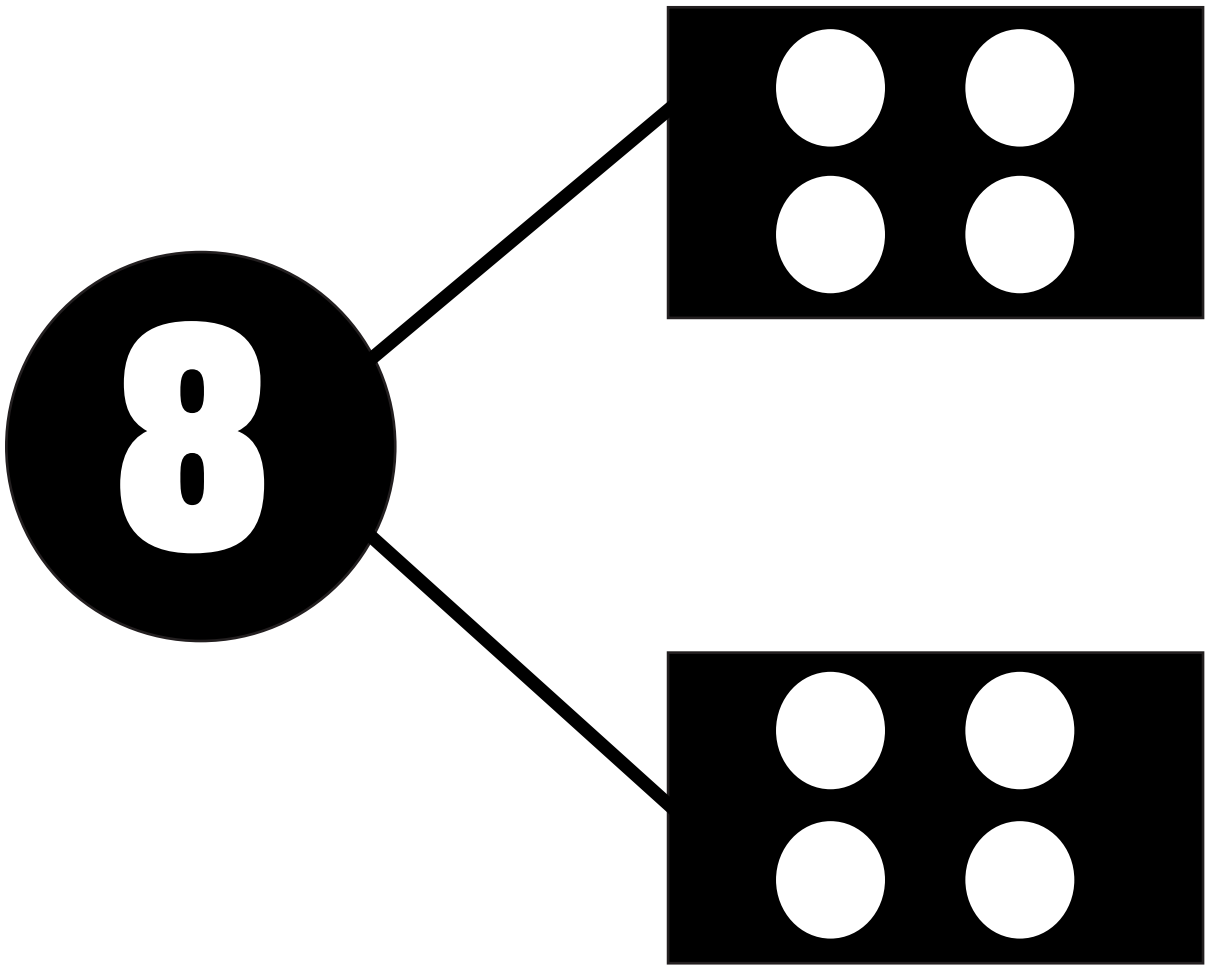




Hint : It's always 1 when you divide a number by itself.

Division Strategies:

PARTITION



8 ÷ 2 = 4

Division Strategies:

PARTITION

$2 \div 2 = 1$

$4 \div 2 = 2$

$6 \div 2 = 3$

Division Strategies:

PARTITION

$8 \div 2 = 4$

$10 \div 2 = 5$

$12 \div 2 = 6$

Division Strategies:

PARTITION

$14 \div 2 = 7$

$16 \div 2 = 8$

$18 \div 2 = 9$

Division Strategies:

PARTITION

$20 \div 2 = 10$

FREE CHOICE

FREE CHOICE

Division Strategies:

RELATED FACT

14 ÷ 2 = __

think

2 x __ = 14

2 ÷ 2 = __

think

2 x __ = 2

10 ÷ 2 = __

think

2 x __ = 10

18 ÷ 2 = __

think

2 x __ = 18

Division Strategies:

RELATED FACT

6 ÷ 2 = __

think

2 x __ = 6

20 ÷ 2 = __

think

2 x __ = 20

4 ÷ 2 = __

think

2 x __ = 4

12 ÷ 2 = __

think

2 x __ = 12

Division Strategies:

RELATED FACT

8 ÷ 2 = __

think

2 x __ = 8

16 ÷ 2 = __

think

2 x __ = 16

__ ÷ __ = __

think

__ x __ = __

__ ÷ __ = __

think

__ x __ = __

Division Strategies:

REPEATED SUBTRACTION

$$12 \div 2 = ?$$

$$12 - 2 = 10$$

$$10 - 2 = 8$$

$$8 - 2 = 6$$

$$6 - 2 = 4$$

$$4 - 2 = 2$$

$$2 - 2 = 0$$

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

Division Strategies:
REPEATED SUBTRACTION

$12 \div 2 = ?$

$12 - \_\_ = 10$

$\_\_ - 2 = 8$

$\_\_ - 2 = 6$

$6 - \_\_ = 4$

$4 - \_\_ = 2$

$\_\_ - 2 = 0$

$12 \div 2 = \square$

Division Strategies:

REPEATED SUBTRACTION

$14 \div 2 = ?$

$14 - \_\_ = 12$

$12 - \_\_ = 10$

$\_\_ - 2 = 8$

$\_\_ - 2 = 6$

$6 - \_\_ = 4$

$4 - \_\_ = 2$

$\_\_ - 2 = 0$

$14 \div 2 = \square$

Division Strategies:
REPEATED SUBTRACTION

10 ÷ 2 = ?

__ - 2 = 8

__ - 2 = 6

6 - __ = 4

4 - __ = 2

__ - 2 = 0

10 ÷ 2 = □

Division Strategies:

REPEATED SUBTRACTION

$16 \div 2 = ?$

$16 - \_\_ = 14$

$14 - \_\_ = 12$

$12 - \_\_ = 10$

$\_\_ - 2 = 8$

$\_\_ - 2 = 6$

$6 - \_\_ = 4$

$4 - \_\_ = 2$

$\_\_ - 2 = 0$

$16 \div 2 = \square$

Division Strategies:

REPEATED SUBTRACTION

$$20 \div 2 = ?$$

$$20 - \_\_ = 18$$

$$18 - \_\_ = 16$$

$$16 - \_\_ = 14$$

$$14 - \_\_ = 12$$

$$12 - \_\_ = 10$$

$$\_\_ - 2 = 8$$

$$\_\_ - 2 = 6$$

$$6 - \_\_ = 4$$

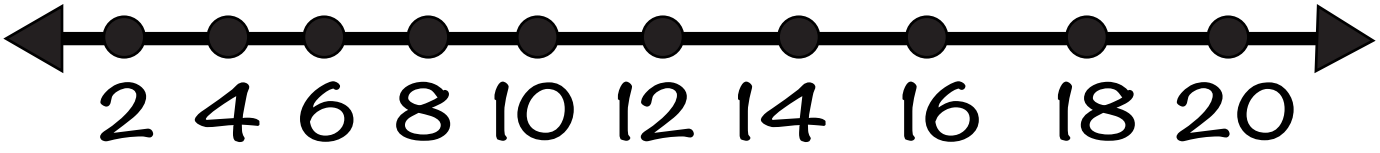
$$4 - \_\_ = 2$$

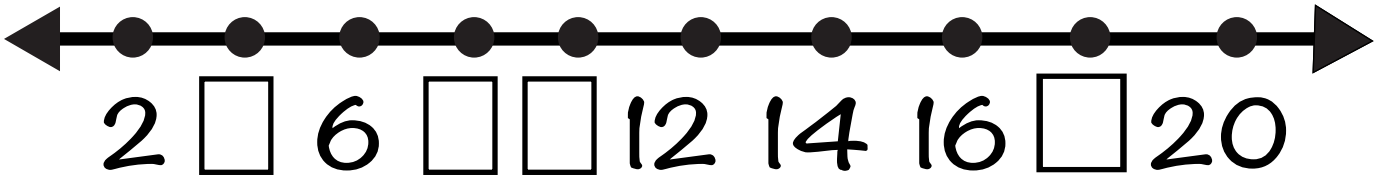
$$2 - \_\_ = 0$$

$$20 \div 2 = \square$$

Modeling Division:
SKIP COUNTING

DRAW ON A NUMBER LINE





FILL IN THE MISSING NUMBERS

2		6		10		14			20

		6		10		14			20

Modeling Division:
SKIP COUNTING

FILL IN THE MISSING NUMBERS

2		6		10		14			20

FILL IN THE MISSING NUMBERS

	4		8	10		14		18	

FILL IN THE MISSING NUMBERS

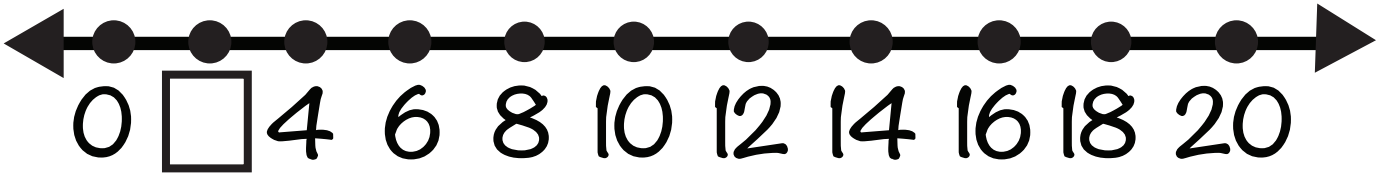
	4		8		12		16		20

FILL IN THE MISSING NUMBERS

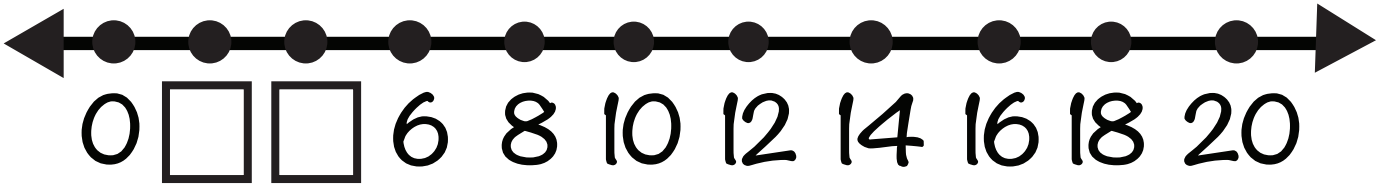
2		6		10		14		18	

Division Strategies:
SKIP COUNTING

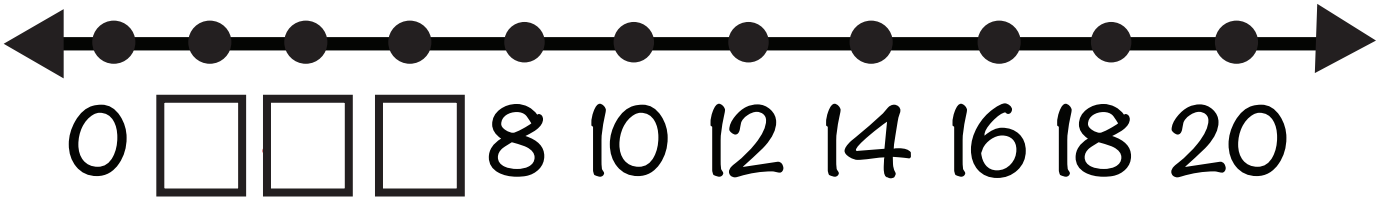
FILL IN THE MISSING NUMBERS. MODEL 2 ÷ 2 ON THE NUMBER LINE.



FILL IN THE MISSING NUMBERS. MODEL 4 ÷ 2 ON THE NUMBER LINE.

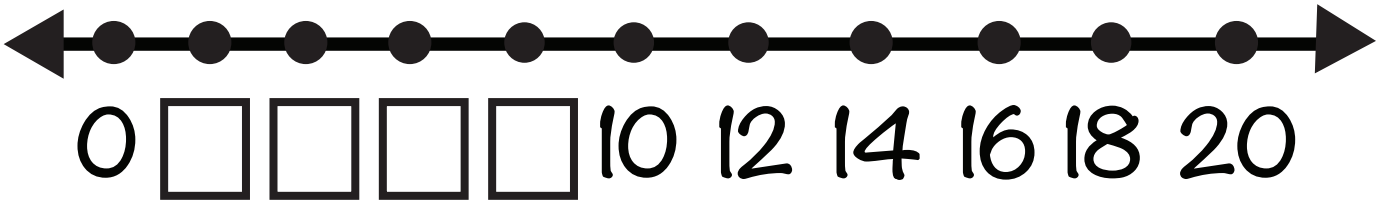


FILL IN THE MISSING NUMBERS. MODEL 6 ÷ 2 ON THE NUMBER LINE.

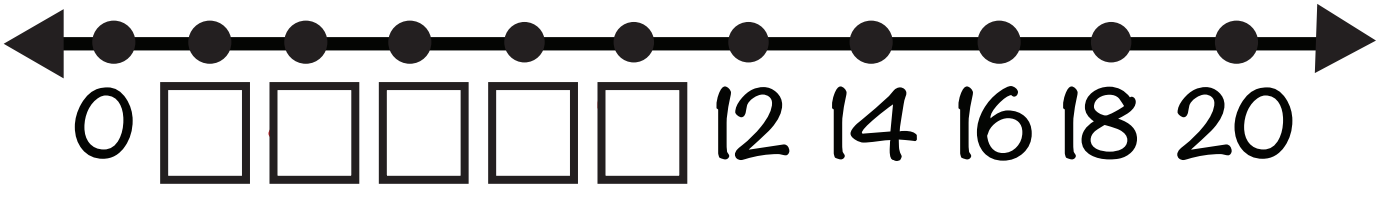


Division Strategies:
SKIP COUNTING

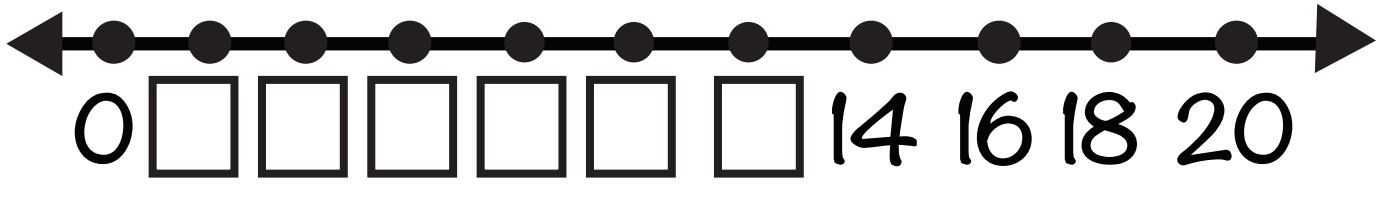
FILL IN THE MISSING NUMBERS. MODEL 8 ÷ 2 ON THE NUMBER LINE.



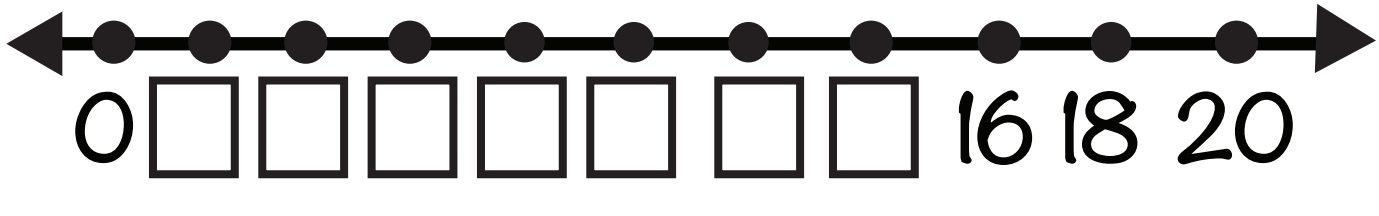
FILL IN THE MISSING NUMBERS. MODEL 10 ÷ 2 ON THE NUMBER LINE.



FILL IN THE MISSING NUMBERS. MODEL 12 ÷ 2 ON THE NUMBER LINE.

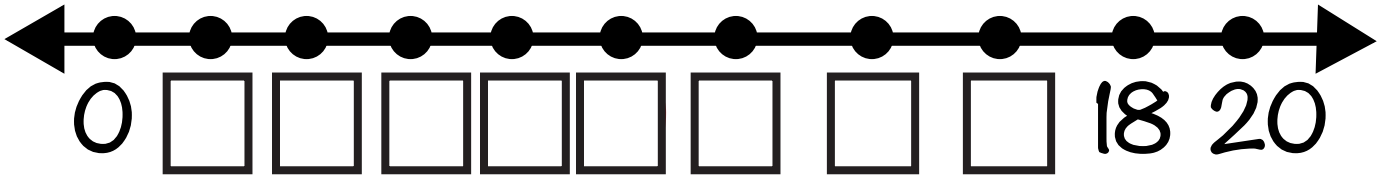


FILL IN THE MISSING NUMBERS. MODEL 14 ÷ 2 ON THE NUMBER LINE.

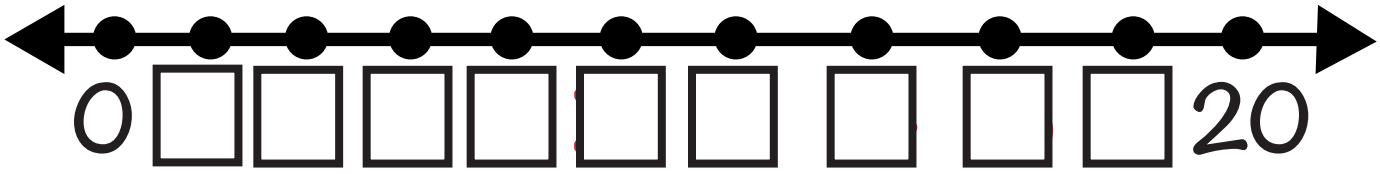


Division Strategies:
SKIP COUNTING

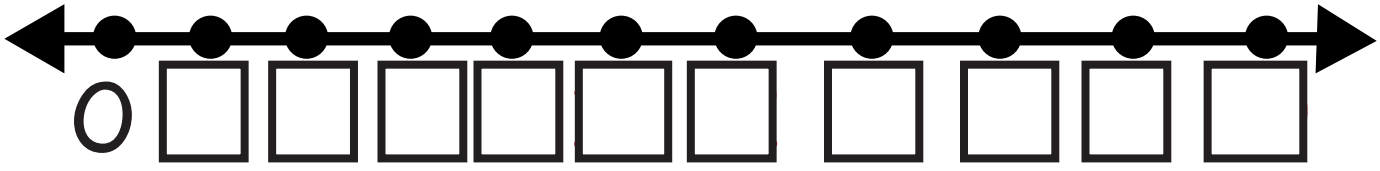
FILL IN THE MISSING NUMBERS. MODEL 16 ÷ 2 ON THE NUMBER LINE.



FILL IN THE MISSING NUMBERS. MODEL 18 ÷ 2 ON THE NUMBER LINE.



FILL IN THE MISSING NUMBERS. MODEL 20 ÷ 2 ON THE NUMBER LINE.



Division Strategies:

NUMBER LINES

There are 12 cookies and you put 2 in a bag. How many bags do you have?

12 ÷ 2 = 12

How many jumps until you get 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 zero?

2 ÷ 2

4 ÷ 2

6 ÷ 2

8 ÷ 2

Division Strategies:

NUMBER LINES

10 ÷ 2

12 ÷ 2

14 ÷ 2

16 ÷ 2

18 ÷ 2

20 ÷ 2

Division Strategies:

SKIP COUNTING CHART

2	12
4	14
6	16
8	18
10	20

Division Vocabulary

dividend | divisor | quotient

$$12 \div 2 = 6$$

$$2\overline{)12}$$ with quotient 6

divisor: 2 — dividend: 12 — quotient: 6

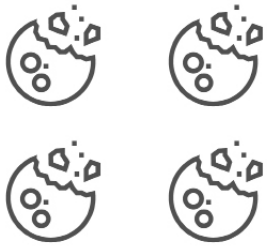
$$\frac{12}{2} = 6$$

dividend: 12 — divisor: 2 — quotient: 6

Array Flashcards

USE THE MODEL TO SOLVE

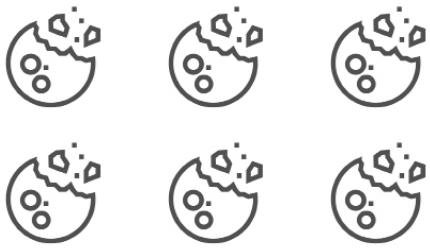
2 ÷ 2 = ___



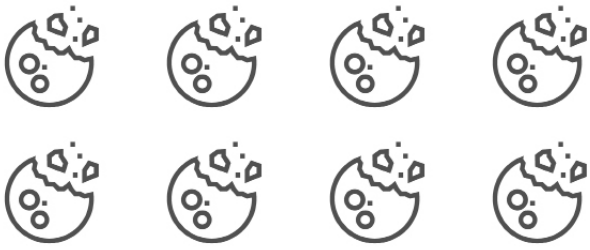
4 ÷ 2 = ___

Array Flashcards

USE THE MODEL TO SOLVE



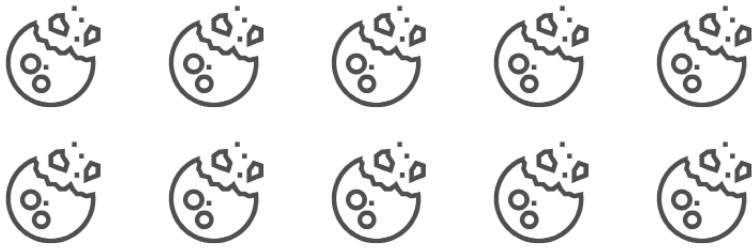
6 ÷ 2 = ___



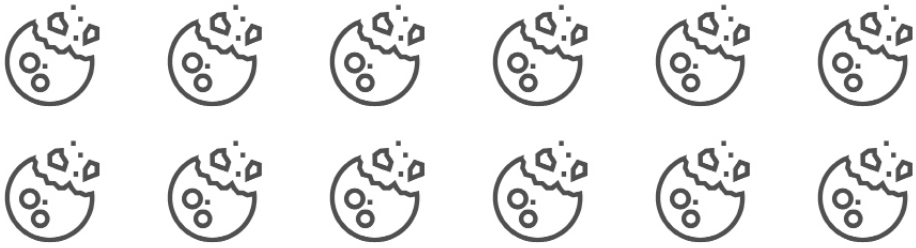
8 ÷ 2 = ___

Array Flashcards

USE THE MODEL TO SOLVE



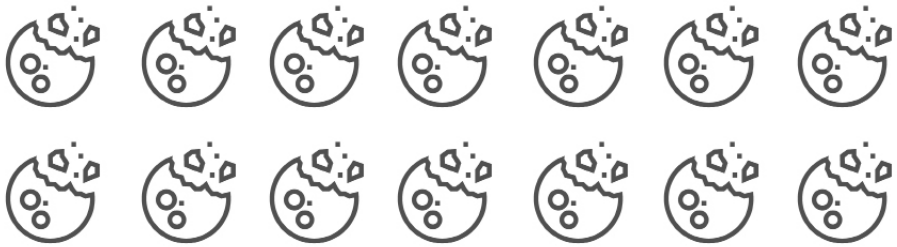
10 ÷ 2 = ___



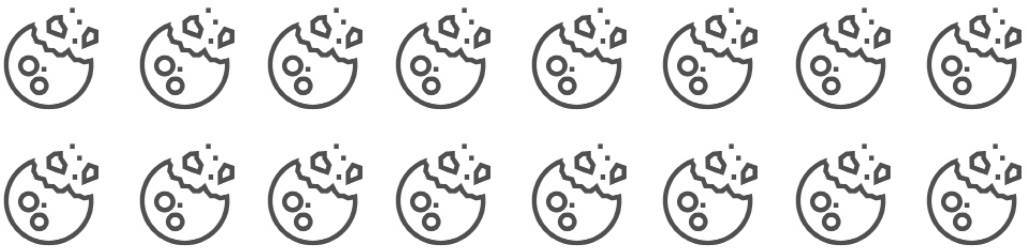
12 ÷ 2 = ___

Array Flashcards

USE THE MODEL TO SOLVE



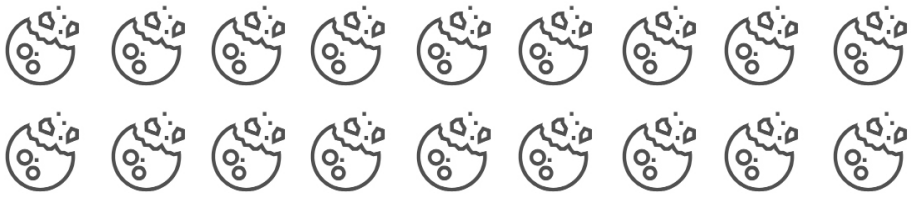
14 ÷ 2 = ___



16 ÷ 2 = ___

Array Flashcards

USE THE MODEL TO SOLVE



18 ÷ 2 = ___

20 ÷ 2 = ___

Array Flashcards

WRITE AN EQUATION THAT MATCHES THE ARRAY.

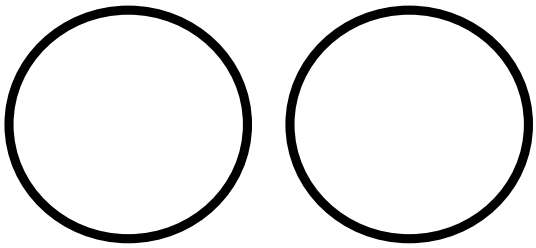
FREE CHOICE

FREE CHOICE

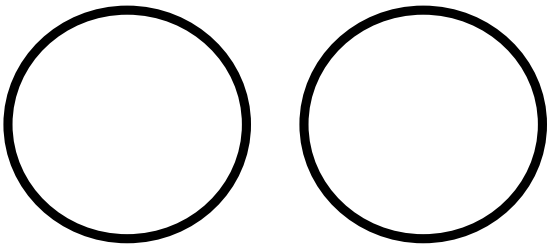
Equal Group Flashcards

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

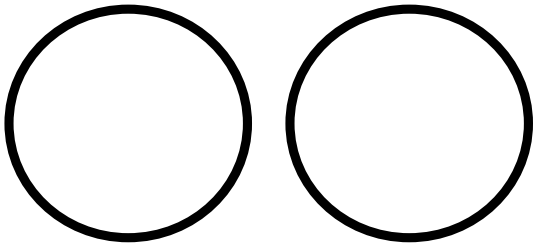
2 ÷ 2 = ____



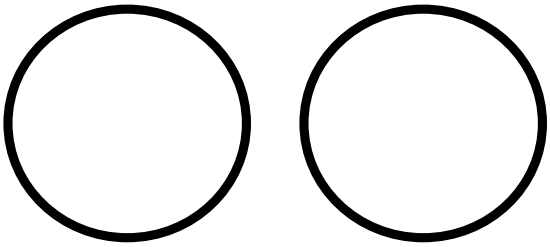
4 ÷ 2 = ____



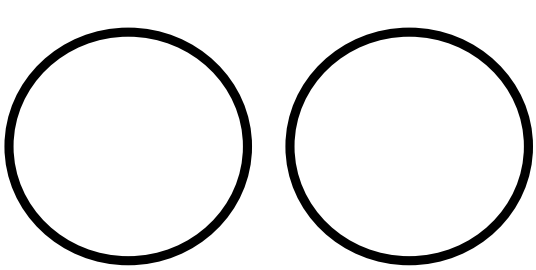
6 ÷ 2 = ____



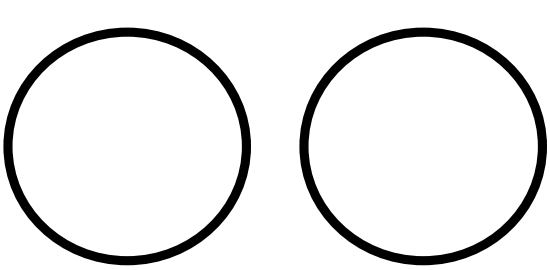
8 ÷ 2 = ____



10 ÷ 2 = ____



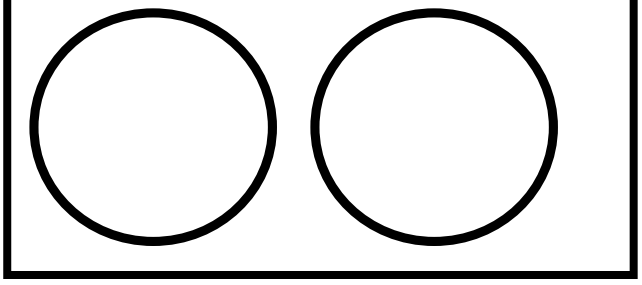
12 ÷ 2 = ____



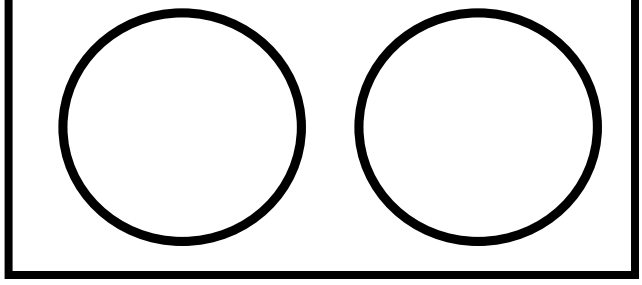
Equal Group Flashcards

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

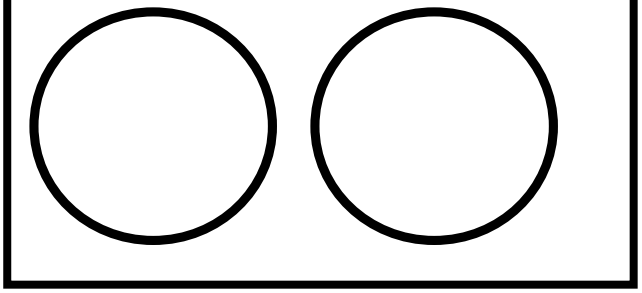
14 ÷ 2 = ____



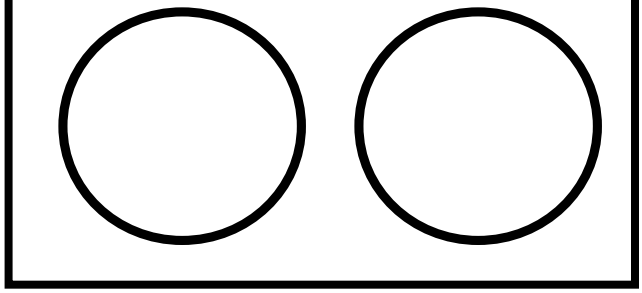
16 ÷ 2 = ____



18 ÷ 2 = ____



20 ÷ 2 = ____



Regular Flashcards

0 ÷ 2	2 ÷ 2
4 ÷ 2	6 ÷ 2
8 ÷ 2	10 ÷ 2

Regular Flashcards

12 ÷ 2	14 ÷ 2
16 ÷ 2	18 ÷ 2
20 ÷ 2	

Dividing by 2 Calling Cards

1	2	3	4	5
6	7	8	9	10

Dividing by 2
4 IN A ROW

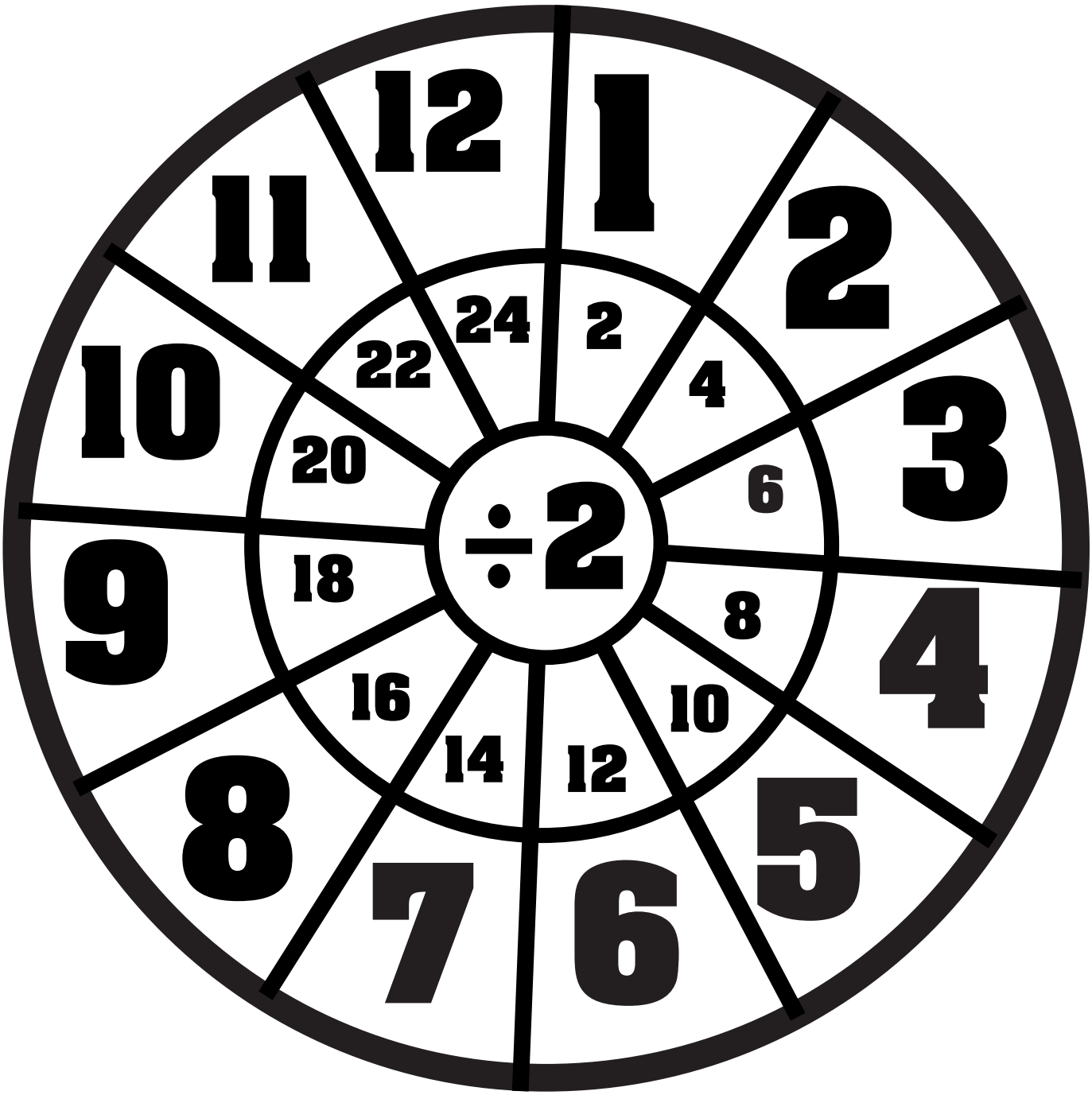
CHECK YOUR ANSWERS USING YOUR BOOKMARK.

20÷2=?	16÷2=?	12÷2=?	6÷2=?	2÷2=?	10÷2=?
8÷2=?	18÷2=?	4÷2=?	4÷2=?	14÷2=?	2÷2=?
20÷2=?	12÷2=?	6÷2=?	10÷2=?	18÷2=?	4÷2=?
16÷2=?	2÷2=?	8÷2=?	14÷2=?	2÷2=?	4÷2=?
12÷2=?	6÷2=?	20÷2=?	18÷2=?	16÷2=?	8÷2=?
10÷2=?	4÷2=?	14÷2=?	8÷2=?	18÷2=?	2÷2=?
16÷2=?	18÷2=?	2÷2=?	6÷2=?	12÷2=?	10÷2=?

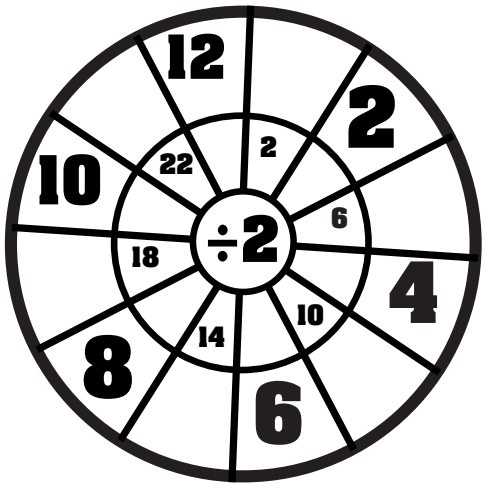
Instructions:

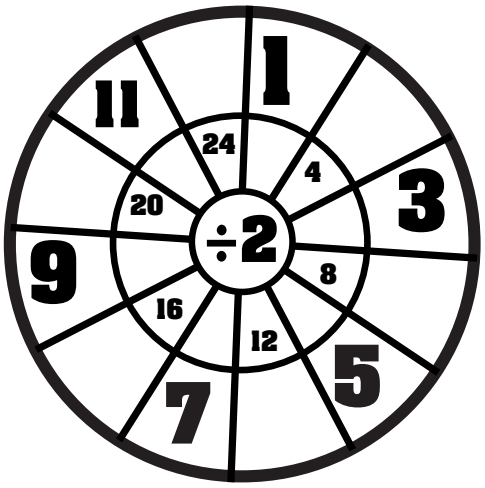
1. Each person pulls a card. Whoever has the largest number starts.
2. Take turns pulling a card and cover the expression that matches that quotient.
3. The first player to get 4 in a row wins!
4. Play again!

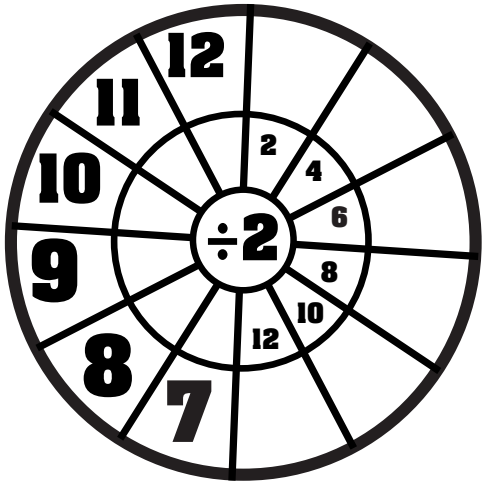
DIVISION WHEELS

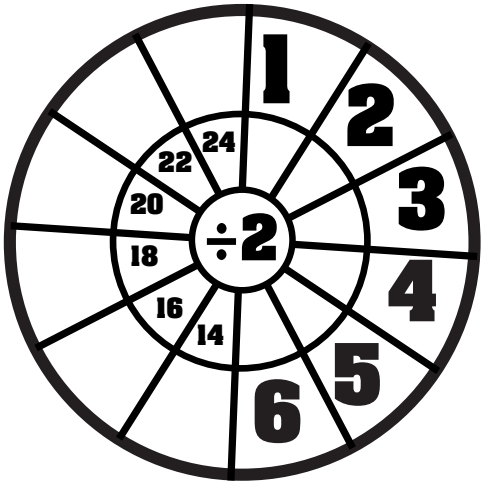


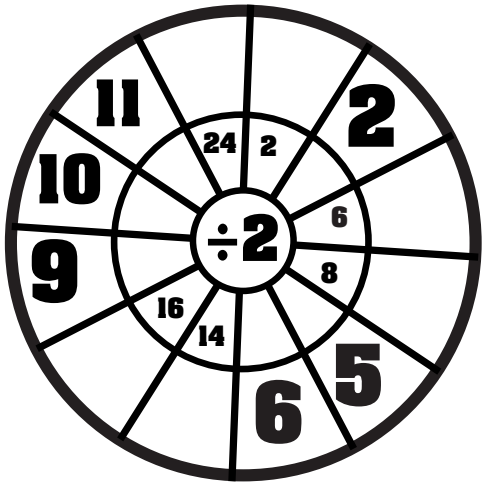
DIVISION WHEELS

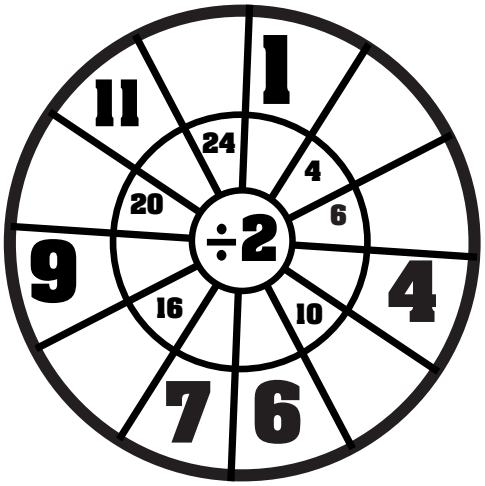












PICTURE FACT FAMILY

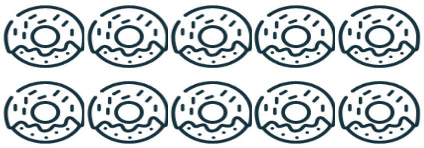
____ x ____ = ____
____ x ____ = ____
____ ÷ ____ = ____
____ ÷ ____ = ____

____ x ____ = ____
____ x ____ = ____
____ ÷ ____ = ____
____ ÷ ____ = ____

____ x ____ = ____
____ x ____ = ____
____ ÷ ____ = ____
____ ÷ ____ = ____

____ x ____ = ____
____ x ____ = ____
____ ÷ ____ = ____
____ ÷ ____ = ____

PICTURE FACT FAMILY

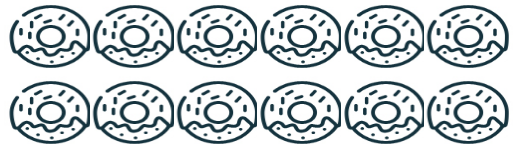


_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____

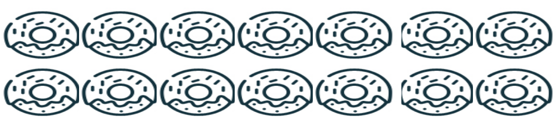


_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____



_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____

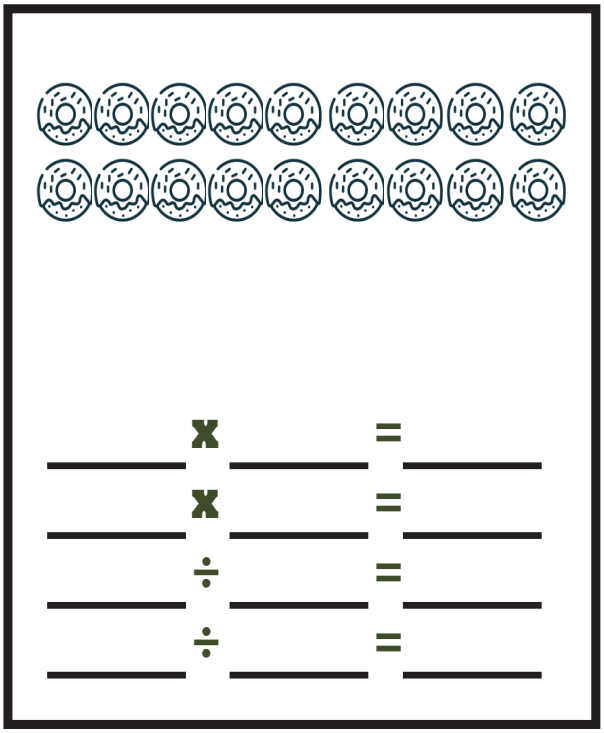
_____ x _____ = _____

_____ x _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____

PICTURE FACT FAMILY



_____ × _____ = _____

_____ × _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____

MAKE YOUR OWN

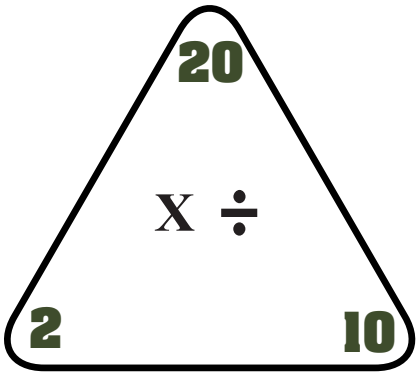
_____ × _____ = _____

_____ × _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____

TRIANGLE FACT FAMILY

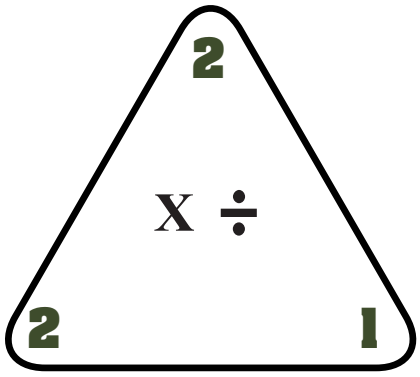


____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

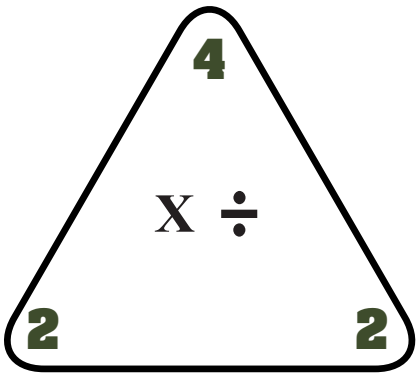


____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

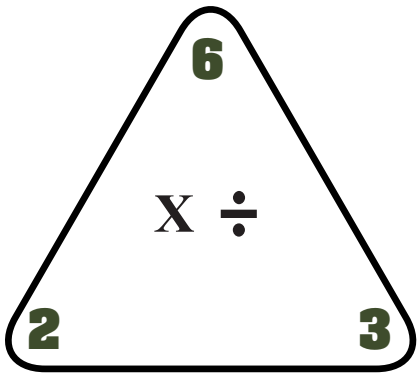


____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____



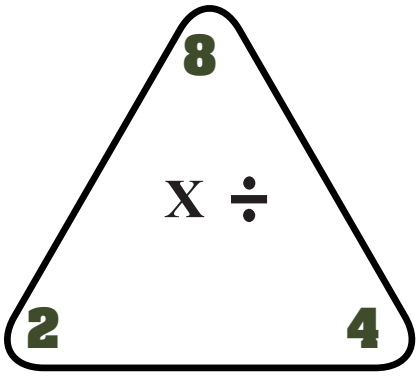
____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

TRIANGLE FACT FAMILY

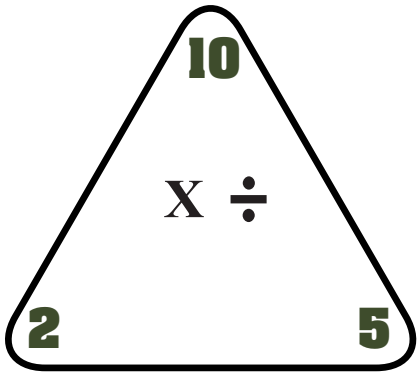


____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

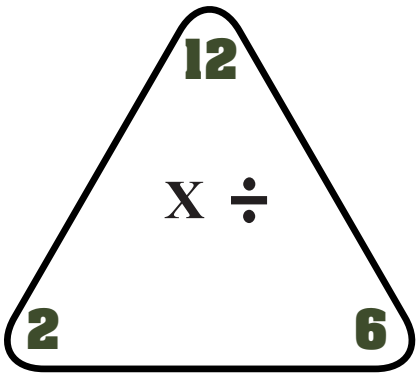


____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

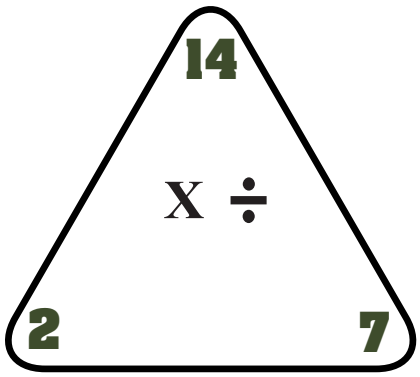


____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____



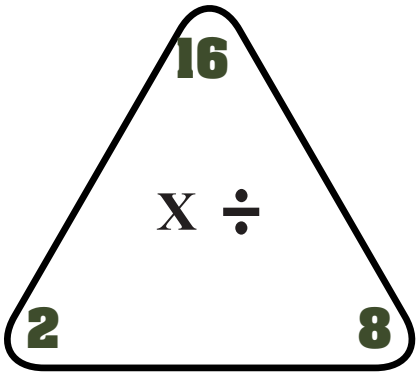
____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

TRIANGLE FACT FAMILY

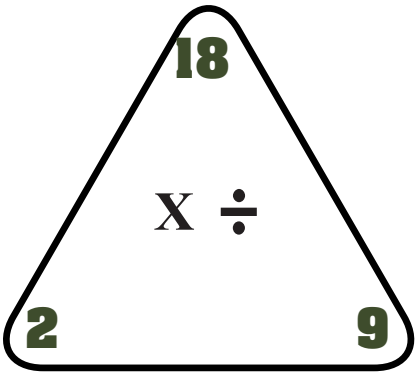


____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

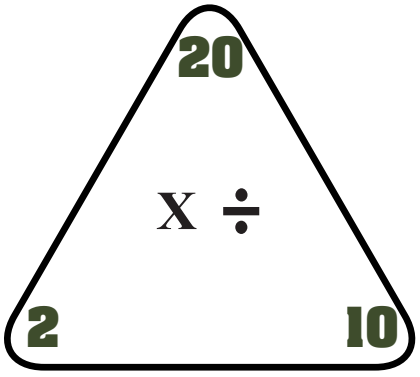


____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____



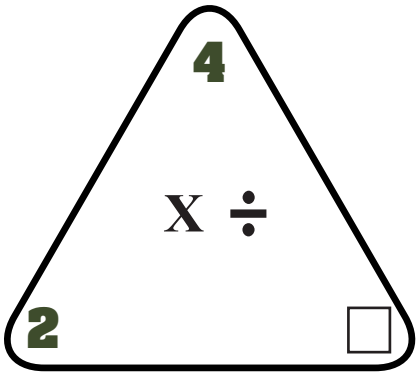
____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

TRIANGLE FACT FAMILY

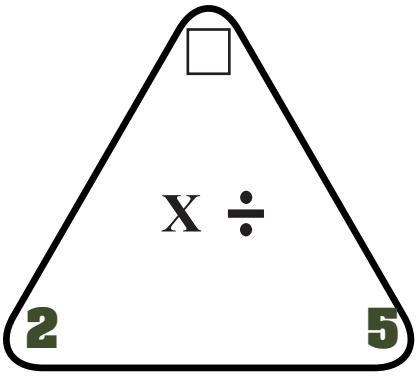


____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

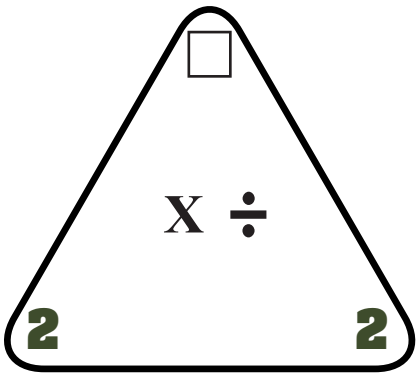


____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

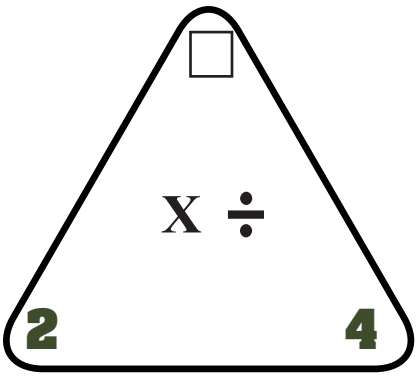


____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____



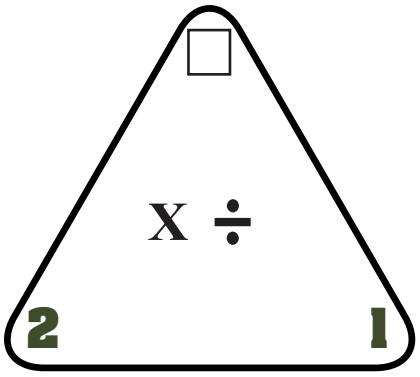
____ x ____ = ____

____ x ____ = ____

____ ÷ ____ = ____

____ ÷ ____ = ____

TRIANGLE FACT FAMILY

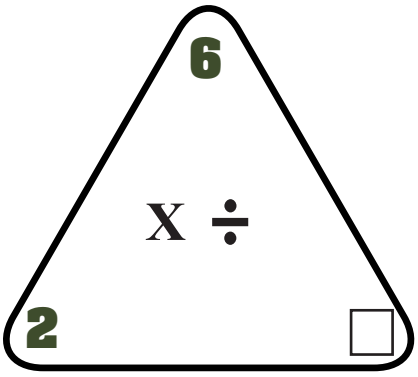


___ x ___ = ___

___ x ___ = ___

___ ÷ ___ = ___

___ ÷ ___ = ___

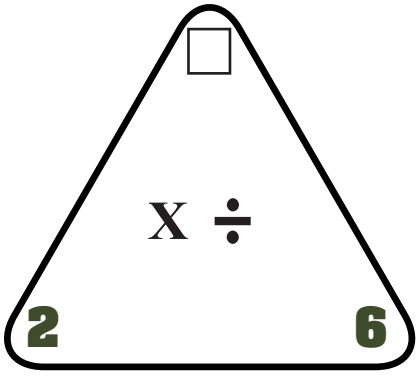


___ x ___ = ___

___ x ___ = ___

___ ÷ ___ = ___

___ ÷ ___ = ___

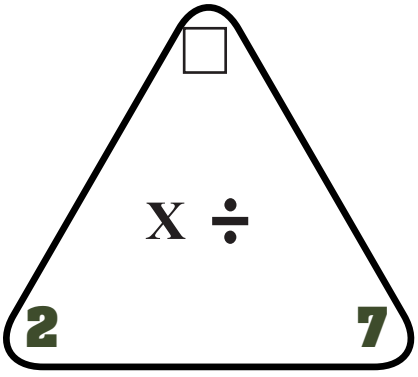


___ x ___ = ___

___ x ___ = ___

___ ÷ ___ = ___

___ ÷ ___ = ___



___ x ___ = ___

___ x ___ = ___

___ ÷ ___ = ___

___ ÷ ___ = ___

WORD PROBLEM

MODEL YOUR THINKING AND SOLVE THE PROBLEM.

THE BAKERY HAD 14 DONUTS IN 2 ROWS. THEY HAD THE SAME AMOUNT IN EACH ROW. HOW MANY WERE IN EACH ROW?

_____ ÷ _____ = _____

THE BAKERY HAD 10 DONUTS. THEY PUT 2 IN A ROW. HOW MANY ROWS DID THEY MAKE?

_____ ÷ _____ = _____

THE BAKERY MADE 20 MUFFINS. THEY PACKED 2 IN A BOX. HOW MANY BOXES DID THEY USE?

_____ ÷ _____ = _____

THE BAKERY MADE 8 HAND PIES. THEY USED 2 BOXES. THEY PUT THE SAME AMOUNT OF PIES IN EACH BOX. HOW MANY HAND PIES DID THEY PUT IN EACH BOX?

_____ ÷ _____ = _____

QUIZ

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

I CAN SKIP COUNT TO DIVIDE BY 2'S!	I CAN USE EQUAL GROUPS TO DIVIDE BY 2'S!

I CAN USE ARRAYS TO MODEL DIVIDING BY 2'S!	I CAN MODEL DIVIDING BY 2'S ON THE NUMBER LINE!

I CAN USE REPEATED SUBTRACTION TO DIVIDE BY 2'S.	MY STRATEGY FOR THINKING ABOUT DIVIDING BY 2'S IS....

GREAT MATH WORK!

CERTIFICATE

_____

HAS SUCCESSFULLY PRACTICED DIVIDING BY 2'S!

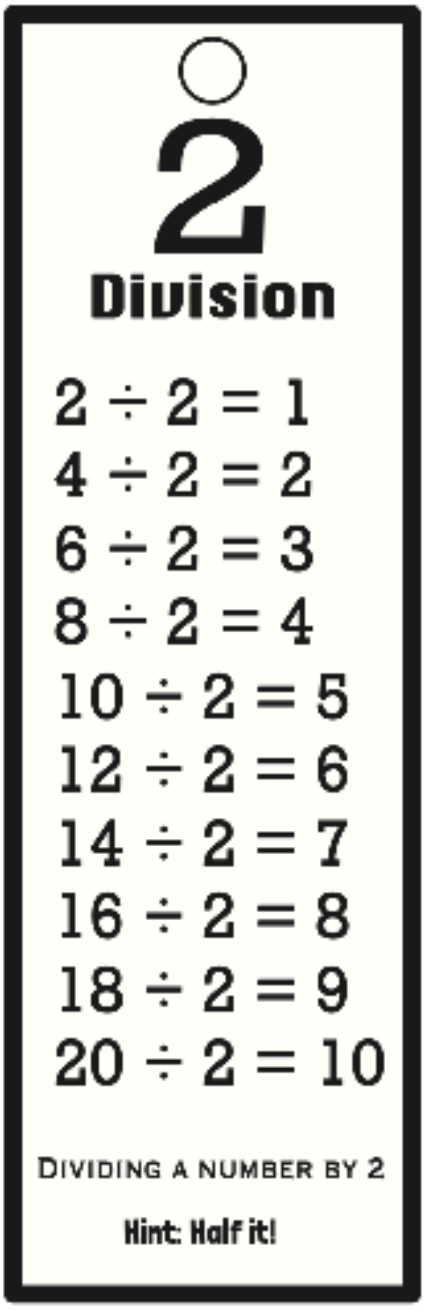
GREAT JOB!

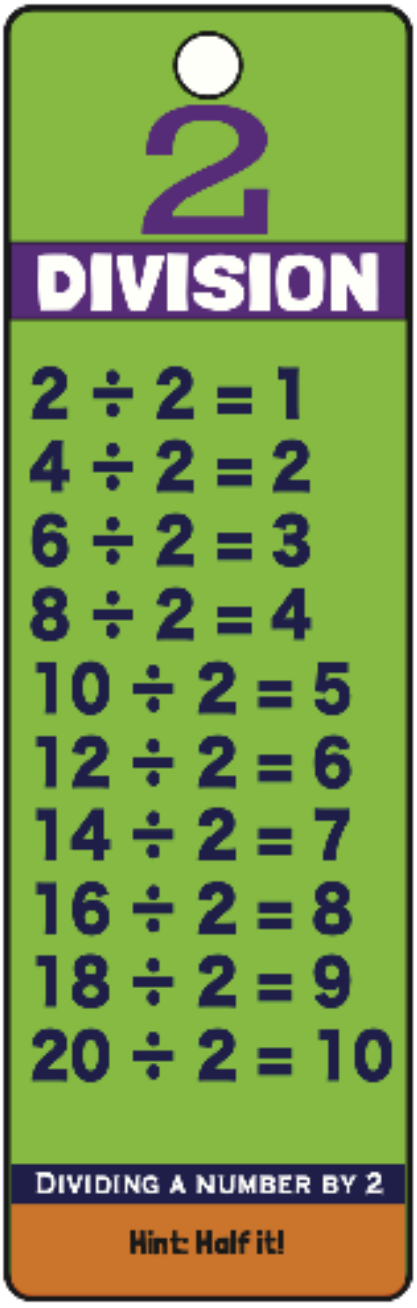
TEACHER: _____ **DATE:** _____

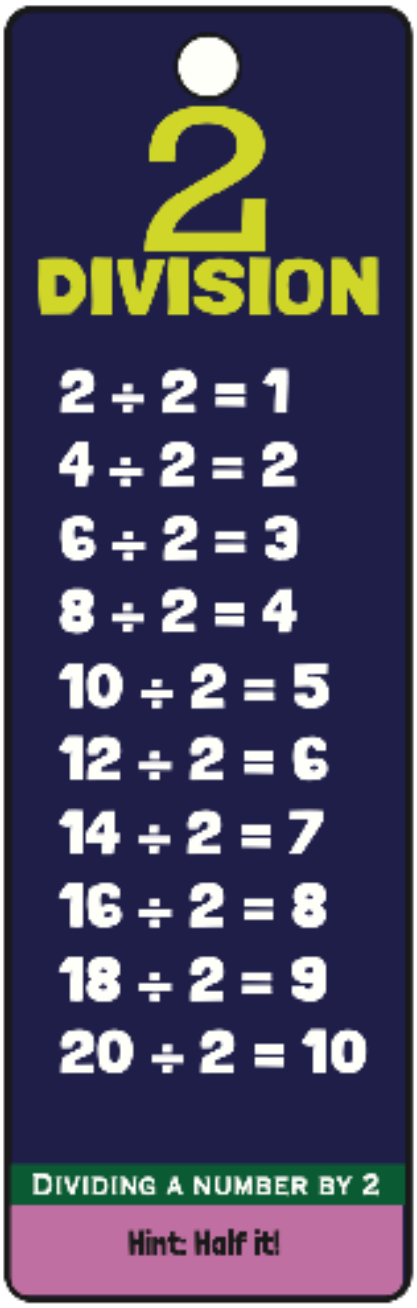
Looking at the 2's

2 ÷ 2 = 1	12 ÷ 2= 6
4 ÷ 2 = 2	14 ÷ 2 = 7
6 ÷ 2 = 3	16 ÷ 2 = 8
8 ÷ 2 = 4	18 ÷ 2 = 9
10 ÷ 2 = 5	20 ÷ 2 = 10

Bookmarks


2
Division
2 ÷ 2 = 1
4 ÷ 2 = 2
6 ÷ 2 = 3
8 ÷ 2 = 4
10 ÷ 2 = 5
12 ÷ 2 = 6
14 ÷ 2 = 7
16 ÷ 2 = 8
18 ÷ 2 = 9
20 ÷ 2 = 10
DIVIDING A NUMBER BY 2
Hint: Half it!


2
DIVISION
2 ÷ 2 = 1
4 ÷ 2 = 2
6 ÷ 2 = 3
8 ÷ 2 = 4
10 ÷ 2 = 5
12 ÷ 2 = 6
14 ÷ 2 = 7
16 ÷ 2 = 8
18 ÷ 2 = 9
20 ÷ 2 = 10
DIVIDING A NUMBER BY 2
Hint: Half it!


2
DIVISION
2 ÷ 2 = 1
4 ÷ 2 = 2
6 ÷ 2 = 3
8 ÷ 2 = 4
10 ÷ 2 = 5
12 ÷ 2 = 6
14 ÷ 2 = 7
16 ÷ 2 = 8
18 ÷ 2 = 9
20 ÷ 2 = 10
DIVIDING A NUMBER BY 2
Hint: Half it!