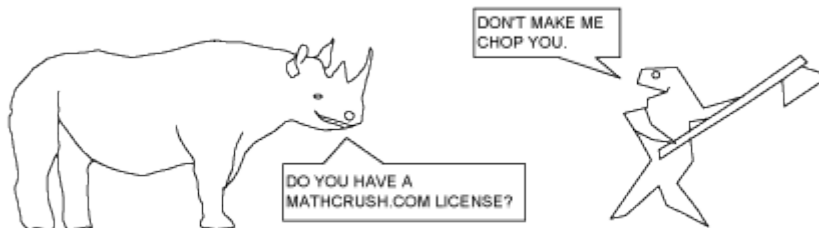


DIVISION - LEVEL 1



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MULTIPLICATION FACTS



BELOW IS A TABLE OF THE BASIC MULTIPLICATION FACTS. ON PAGE 3 IS ANOTHER VERSION. YOU CAN CHOOSE WHICH ONE YOU WANT TO USE.



SINCE DIVISION IS THE OPPOSITE OF MULTIPLICATION, YOU NEED TO KNOW YOUR BASIC MULTIPLICATION FACTS BEFORE YOU CAN DIVIDE.

| X | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 | 52 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | 77 | 84 | 91 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 88 | 96 | 104 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 | 99 | 108 | 117 |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 |
| 11 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 110 | 121 | 132 | 143 |
| 12 | 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 | 156 |
| 13 | 13 | 26 | 39 | 52 | 65 | 78 | 91 | 104 | 117 | 130 | 143 | 156 | 169 |

REVIEW - A



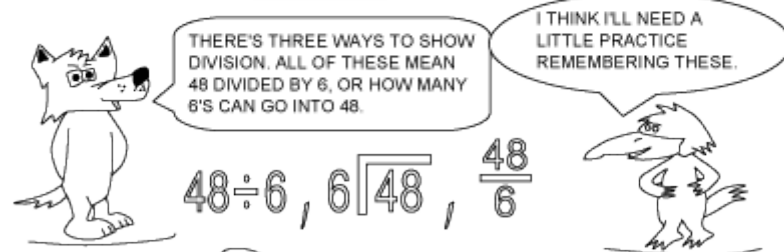
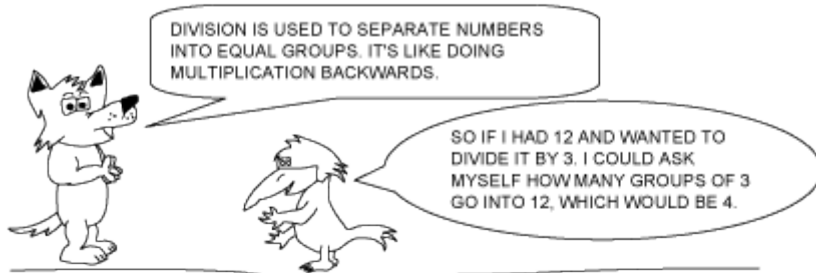
WHILE LEARNING DIVISION, WE WILL BE USING ADDITION, SUBTRACTION, AND MULTIPLICATION.

SO BEFORE WE START, LET'S DO A FEW REVIEW PAGES.



| | | |
|------------------|------------------|------------------|
| $7 + 8 =$ _____ | $4 + 6 =$ _____ | $7 + 6 =$ _____ |
| $5 + 4 =$ _____ | $3 + 9 =$ _____ | $13 + 4 =$ _____ |
| $8 + 6 =$ _____ | $7 + 11 =$ _____ | $9 + 7 =$ _____ |
| $2 + 13 =$ _____ | $9 + 8 =$ _____ | $3 + 5 =$ _____ |
| $5 + 0 =$ _____ | $13 + 4 =$ _____ | $5 + 8 =$ _____ |
| $6 + 9 =$ _____ | $10 + 5 =$ _____ | $4 + 13 =$ _____ |
| $1 + 4 =$ _____ | $3 + 7 =$ _____ | $7 + 7 =$ _____ |
| $0 + 6 =$ _____ | $5 + 8 =$ _____ | $0 + 4 =$ _____ |
| $9 + 7 =$ _____ | $7 + 10 =$ _____ | $1 + 8 =$ _____ |
| $11 + 4 =$ _____ | $11 + 9 =$ _____ | $3 + 13 =$ _____ |
| $3 + 7 =$ _____ | $3 + 6 =$ _____ | $5 + 8 =$ _____ |
| $5 + 10 =$ _____ | $8 + 12 =$ _____ | $7 + 10 =$ _____ |
| $7 + 6 =$ _____ | $6 + 5 =$ _____ | $8 + 4 =$ _____ |
| $8 + 2 =$ _____ | $12 + 5 =$ _____ | $11 + 8 =$ _____ |
| $9 + 11 =$ _____ | $5 + 6 =$ _____ | $5 + 8 =$ _____ |
| $3 + 6 =$ _____ | $8 + 8 =$ _____ | $7 + 7 =$ _____ |
| $12 + 5 =$ _____ | $4 + 7 =$ _____ | $9 + 12 =$ _____ |
| $7 + 4 =$ _____ | $2 + 13 =$ _____ | $12 + 8 =$ _____ |
| $9 + 3 =$ _____ | $11 + 5 =$ _____ | $7 + 5 =$ _____ |
| $6 + 2 =$ _____ | $0 + 13 =$ _____ | $8 + 9 =$ _____ |
| $4 + 9 =$ _____ | $8 + 8 =$ _____ | $13 + 8 =$ _____ |
| $9 + 8 =$ _____ | $9 + 6 =$ _____ | $9 + 5 =$ _____ |
| $8 + 7 =$ _____ | $6 + 12 =$ _____ | $8 + 11 =$ _____ |

INTRODUCTION TO DIVISION (÷)



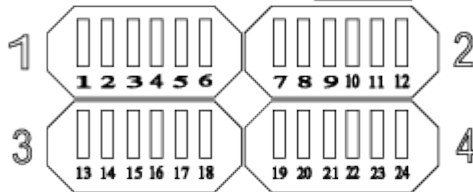
UNDERSTANDING DIVISION



LET'S TAKE A LOOK AT SOME PROBLEMS. I'M GOING TO USE LINES TO MAKE SURE YOU UNDERSTAND WHAT DIVISION IS ALL ABOUT.

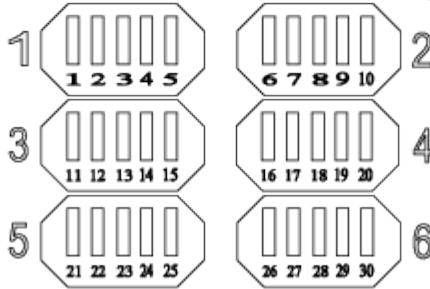
24 DIVIDED BY 6...I SEE WHAT YOU DID. YOU MADE GROUPS OF 6 UNTIL YOU REACHED 24. THEN YOU COUNTED HOW MANY GROUPS THERE ARE.

$$24 \div 6 = 4$$



VERY GOOD POE, NOW TRY THIS ONE.

$$30 \div 5 = ?$$



WELL, IF I MAKE GROUPS OF 5 UNTIL I REACH 30. I CAN MAKE 6 OF THEM. SO THE ANSWER MUST BE 6.

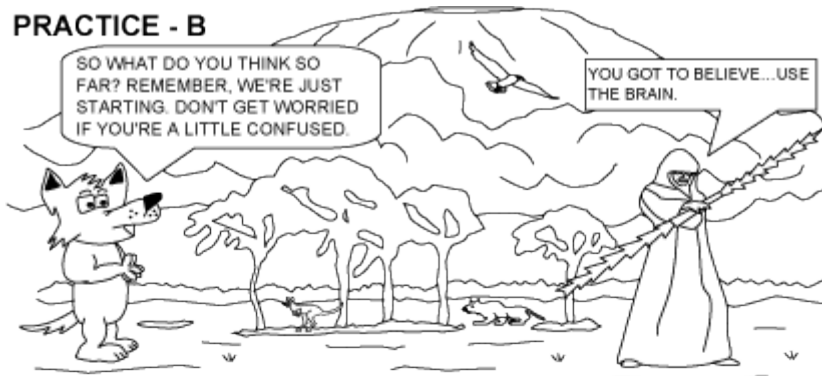


THAT LOOKS SPERFECT.



$$30 \div 5 = 6$$

PRACTICE - B




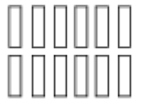
HELPFUL EXAMPLE

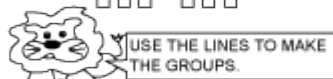
$24 \div 8 = 3$





IF YOU ADD ALL OF US TOGETHER WE EQUAL 24, BUT WE CAN ALSO MAKE 3 GROUPS OF 8.


1. $6 \div 3 = \underline{\quad}$
 = 6


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





3. $15 \div 5 = \underline{\quad}$


4. $18 \div 3 = \underline{\quad}$


5. $16 \div 4 = \underline{\quad}$


6. $8 \div 2 = \underline{\quad}$


7. $14 \div 7 = \underline{\quad}$


8. $15 \div 3 = \underline{\quad}$


PRACTICE - B



1. $6 \div 2 = \underline{\quad}$ 2. $15 \div 3 = \underline{\quad}$

MAKE GROUPS OF 2
UNTIL YOU EQUAL 6.

3. $7 \div 7 = \underline{\quad}$ 4. $25 \div 5 = \underline{\quad}$

5. $18 \div 9 = \underline{\quad}$ 6. $9 \div 3 = \underline{\quad}$

7. $10 \div 2 = \underline{\quad}$ 8. $21 \div 3 = \underline{\quad}$

9. $30 \div 6 = \underline{\quad}$ 10. $16 \div 8 = \underline{\quad}$

11. $24 \div 12 = \underline{\quad}$ 12. $27 \div 9 = \underline{\quad}$

13. $14 \div 2 = \underline{\quad}$ 14. $40 \div 5 = \underline{\quad}$

15. $32 \div 8 = \underline{\quad}$ 16. $26 \div 13 = \underline{\quad}$

BASIC DIVISION - CONTINUED



SO ARE YOU TIRED OF DRAWING?



I KNEW THERE WAS A QUICKER WAY.



CHECK OUT THE PROBLEM BELOW, AND IT WILL SHOW YOU ANOTHER WAY TO DIVIDE.

YOU ADDED 8 + 8 + 8, WHICH EQUALS 24. SINCE YOU ADDED THREE 8'S THAT'S THE ANSWER.

$$24 \div 8 = 3$$

$$\begin{array}{r} 8 + 8 + 8 = 24 \\ 1 \quad 2 \quad 3 \end{array}$$



VERY GOOD, POE. NOW TRY THIS ONE.



$$45 \div 5 = \underline{\quad}$$

$$\begin{array}{r} 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 \\ 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \end{array}$$

SO ALL I NEED TO DO IS ADD 5 OVER AND OVER AGAIN UNTIL I REACH 45. THEN COUNT HOW MANY I USED.

$$45 \div 5 = 9$$



NOW YOUR TURN.



$$12 \div 3 = \underline{\quad} \quad 15 \div 5 = \underline{\quad}$$

$$3 + 3 + 3 + 3 = 12$$

$$28 \div 7 = \underline{\quad}$$

PRACTICE - A



HERE ARE SOME PRACTICE PROBLEMS FOR YOU.

OK EVERYONE, LET'S PRACTICE STAYING IN A GROUP.

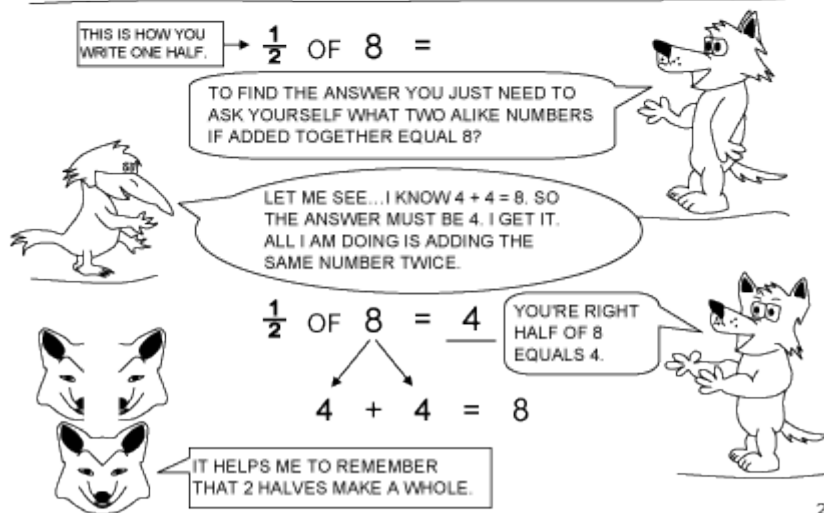


HELPFUL EXAMPLE

$$\begin{array}{r} 21 \div 7 = \underline{3} \\ 7 + 7 + 7 = 21 \\ \begin{array}{ccc} 1 & 2 & 3 \end{array} \end{array}$$

- | | |
|--|--|
| 1. $40 \div 5 = \underline{\quad}$ <u>5+5+5+5+5+5+5+5</u> | 2. $21 \div 3 = \underline{\quad}$ <u>3+3+3+3+3+3+3</u> |
| 3. $10 \div 2 = \underline{\quad}$ | 4. $18 \div 9 = \underline{\quad}$ |
| 5. $3 \div 3 = \underline{\quad}$ | 6. $42 \div 7 = \underline{\quad}$ |
| 7. $16 \div 4 = \underline{\quad}$ | 8. $15 \div 3 = \underline{\quad}$ |
| 9. $32 \div 8 = \underline{\quad}$ | 10. $36 \div 6 = \underline{\quad}$ |
| 11. $28 \div 4 = \underline{\quad}$ | 12. $50 \div 10 = \underline{\quad}$ |
| 13. $6 \div 1 = \underline{\quad}$ | 14. $22 \div 11 = \underline{\quad}$ |

HALF OF A NUMBER (DIVIDING BY 2)

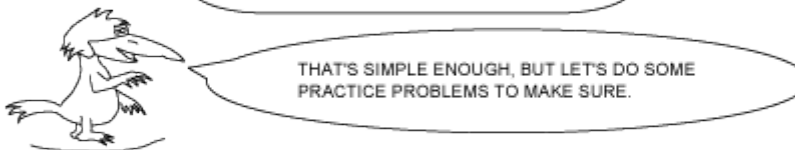
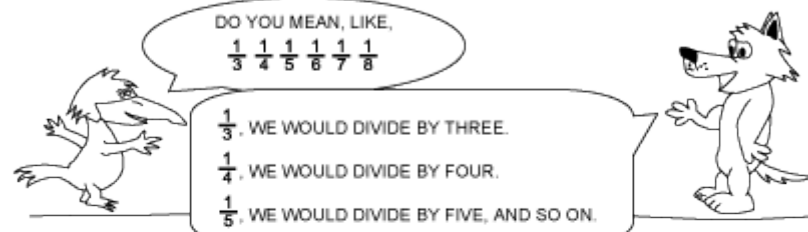
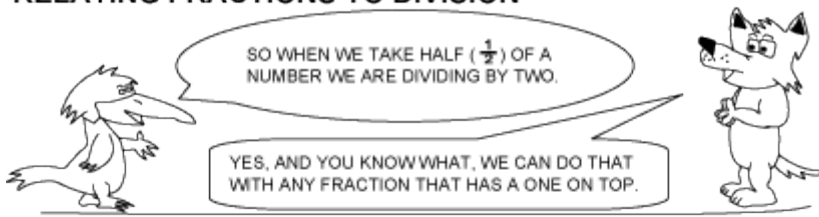


PRACTICE



1. $\frac{1}{2}$ OF 12 = _____
2. $\frac{1}{2}$ OF 68 = _____
3. $220 \div 2 =$ _____
4. $44 \div 2 =$ _____
5. $\frac{1}{2}$ OF 88 = _____
6. $94 \div 2 =$ _____
7. $30 \div 2 =$ _____
8. $\frac{1}{2}$ OF 26 = _____
9. $\frac{1}{2}$ OF 58 = _____
10. $120 \div 2 =$ _____
11. $\frac{1}{2}$ OF 10 = _____
12. $\frac{1}{2}$ OF 32 = _____
13. $160 \div 2 =$ _____
14. $\frac{1}{2}$ OF 50 = _____
15. $36 \div 2 =$ _____
16. $18 \div 2 =$ _____
17. $\frac{1}{2}$ OF 40 = _____
18. $\frac{1}{2}$ OF 24 = _____
19. $\frac{1}{2}$ OF 2 = _____
20. $70 \div 2 =$ _____
21. $66 \div 2 =$ _____
22. $\frac{1}{2}$ OF 30 = _____
23. $\frac{1}{2}$ OF 28 = _____
24. $54 \div 2 =$ _____
25. $\frac{1}{2}$ OF 34 = _____
26. $\frac{1}{2}$ OF 42 = _____
27. $100 \div 2 =$ _____
28. $60 \div 2 =$ _____

RELATING FRACTIONS TO DIVISION



- $\frac{1}{3}$ OF 12 \rightarrow $12 \div 3 = 4$
- $\frac{1}{5}$ OF 20 \rightarrow $20 \div 5 = \underline{\quad}$
- $\frac{1}{9}$ OF 36 \rightarrow $36 \div 9 = \underline{\quad}$
- $\frac{1}{4}$ OF 24 \rightarrow $24 \div 4 = \underline{\quad}$
- $\frac{1}{6}$ OF 18 \rightarrow $18 \div \underline{\quad} = \underline{\quad}$
- $\frac{1}{2}$ OF 8 \rightarrow $8 \div \underline{\quad} = \underline{\quad}$
- $\frac{1}{7}$ OF 21 \rightarrow $21 \div \underline{\quad} = \underline{\quad}$
- $\frac{1}{3}$ OF 18 \rightarrow $18 \div \underline{\quad} = \underline{\quad}$
- $\frac{1}{5}$ OF 30 \rightarrow $\underline{\quad} = \underline{\quad}$
- $\frac{1}{6}$ OF 12 \rightarrow $\underline{\quad} = \underline{\quad}$
- $\frac{1}{4}$ OF 12 \rightarrow $\underline{\quad} = \underline{\quad}$
- $\frac{1}{8}$ OF 24 \rightarrow $\underline{\quad} = \underline{\quad}$

PRACTICE - B



REMEMBER, ALL YOU
NEED TO DO IS ASK
YOURSELF WHAT
TIMES 8 EQUALS 72.

HELPFUL EXAMPLE

$$\begin{array}{r} 72 \div 8 = \underline{\quad ? \quad} \\ ? \times 8 = \underline{72} \\ ? = \underline{9} \text{ ANSWER} \end{array}$$

- | | | | |
|-----|---|-----|---|
| 1. | $\begin{array}{r} 9 \div 3 = \underline{\quad} \\ \underline{\quad} \times 3 = 9 \end{array}$ | 2. | $\begin{array}{r} 96 \div 12 = \underline{\quad} \\ \underline{\quad} \times 12 = 96 \end{array}$ |
| 3. | $\begin{array}{r} 66 \div 6 = \underline{\quad} \\ \underline{\quad} \times 6 = 66 \end{array}$ | 4. | $\begin{array}{r} 49 \div 7 = \underline{\quad} \\ \underline{\quad} \times 7 = 49 \end{array}$ |
| 5. | $\begin{array}{r} 81 \div 9 = \underline{\quad} \\ \underline{\quad} \times 9 = 81 \end{array}$ | 6. | $\begin{array}{r} 78 \div 13 = \underline{\quad} \\ \underline{\quad} \times 13 = 78 \end{array}$ |
| 7. | $\begin{array}{r} 56 \div 7 = \underline{\quad} \\ \underline{\quad} \times 7 = 56 \end{array}$ | 8. | $\begin{array}{r} 25 \div 5 = \underline{\quad} \\ \underline{\quad} \times 5 = 25 \end{array}$ |
| 9. | $\begin{array}{r} 24 \div 2 = \underline{\quad} \\ \underline{\quad} \times 2 = 24 \end{array}$ | 10. | $\begin{array}{r} 40 \div 4 = \underline{\quad} \\ \underline{\quad} \times 4 = 40 \end{array}$ |
| 11. | $\begin{array}{r} 63 \div 7 = \underline{\quad} \\ \underline{\quad} \times 7 = 63 \end{array}$ | 12. | $\begin{array}{r} 48 \div 12 = \underline{\quad} \\ \underline{\quad} \times 12 = 48 \end{array}$ |

BASIC MULTIPLICATION



NOW THAT I THINK ABOUT IT,
MAYBE WE SHOULD PRACTICE
OUR BASIC MULTIPLICATION
FACTS A LITTLE MORE.



AND PEOPLE SAY THAT
I'M A SPACE CASE.

- | | | | | | |
|-----|------------------|-------|-----|------------------|-------|
| 1. | $6 \times 12 =$ | _____ | 2. | $8 \times 13 =$ | _____ |
| 3. | $4 \times 11 =$ | _____ | 4. | $12 \times 4 =$ | _____ |
| 5. | $9 \times 3 =$ | _____ | 6. | $7 \times 8 =$ | _____ |
| 7. | $3 \times 5 =$ | _____ | 8. | $6 \times 11 =$ | _____ |
| 9. | $5 \times 7 =$ | _____ | 10. | $11 \times 12 =$ | _____ |
| 11. | $10 \times 9 =$ | _____ | 12. | $4 \times 8 =$ | _____ |
| 13. | $2 \times 10 =$ | _____ | 14. | $10 \times 0 =$ | _____ |
| 15. | $13 \times 12 =$ | _____ | 16. | $12 \times 6 =$ | _____ |
| 17. | $8 \times 5 =$ | _____ | 18. | $8 \times 1 =$ | _____ |
| 19. | $9 \times 7 =$ | _____ | 20. | $7 \times 2 =$ | _____ |
| 21. | $12 \times 9 =$ | _____ | 22. | $4 \times 8 =$ | _____ |
| 23. | $7 \times 4 =$ | _____ | 24. | $7 \times 7 =$ | _____ |
| 25. | $5 \times 6 =$ | _____ | 26. | $3 \times 4 =$ | _____ |
| 27. | $11 \times 8 =$ | _____ | 28. | $6 \times 13 =$ | _____ |
| 29. | $8 \times 9 =$ | _____ | 30. | $9 \times 11 =$ | _____ |
| 31. | $13 \times 5 =$ | _____ | 32. | $8 \times 8 =$ | _____ |
| 33. | $4 \times 6 =$ | _____ | 34. | $7 \times 3 =$ | _____ |
| 35. | $12 \times 2 =$ | _____ | 36. | $0 \times 9 =$ | _____ |

FAMILIES



SO POE, HOW IS THE DIVISION GOING NOW THAT YOU CAN RELATE IT TO MULTIPLICATION?

IT'S GOING A LOT FASTER. YOU KNOW THIS ALL REMINDS ME OF FAMILIES, LIKE ADDING AND SUBTRACTING.



YOUR TOTALLY RIGHT, POE. MULTIPLICATION AND DIVISION ALSO MAKE UP A FAMILY.

REALLY, ADDITION AND SUBTRACTION ARE A FAMILY, AND SO IS MULTIPLICATION AND DIVISION. THAT'S TOTALLY COOL.



CHECK OUT THE PROBLEM BELOW. IT'LL SHOW YOU AN EXAMPLE OF A COMPLETE MULTIPLICATION AND DIVISION FAMILY.

$$3 \times 6 = 18$$

$$18 \div 6 = 3$$

$$6 \times 3 = 18$$

$$18 \div 3 = 6$$

YOU USED 3, 6, AND 18 IN ALL OF THE EQUATIONS.



AS YOU'VE SEEN EARLIER, A SIMPLE WAY OF CONNECTING THEM TOGETHER IS TO TREAT DIVISION LIKE IT'S MULTIPLICATION BACKWARDS.



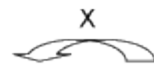
$$3 \times 6 = 18$$

$$18 \div 6 = 3$$



$$6 \times 3 = 18$$

$$18 \div 3 = 6$$



PRACTICE - B



HELPFUL EXAMPLE

$$4 \times 12 = 48 \leftrightarrow 48 \div 12 = 4$$
$$12 \times 4 = 48 \leftrightarrow 48 \div 4 = 12$$

REMEMBER TO THINK OF DIVISION AS THE OPPOSITE OF MULTIPLICATION.

1. $5 \times \underline{\quad} = 45$
 $\underline{\quad} \div 9 = 5$
 $\underline{\quad} \times 5 = \underline{\quad}$
 $45 \div 5 = \underline{\quad}$

2. $6 \times 11 = \underline{\quad}$
 $66 \div \underline{\quad} = 6$
 $\underline{\quad} \times 6 = 66$
 $\underline{\quad} \div \underline{\quad} = 11$

3. $\underline{\quad} \times 7 = 28$
 $28 \div 7 = \underline{\quad}$
 $7 \times \underline{\quad} = \underline{\quad}$
 $28 \div 4 = \underline{\quad}$

4. $8 \times \underline{\quad} = 96$
 $\underline{\quad} \div 12 = 8$
 $\underline{\quad} \times 8 = \underline{\quad}$
 $96 \div \underline{\quad} = 12$

5. $11 \times 13 = \underline{\quad}$
 $\underline{\quad} \div 13 = 11$
 $13 \times 11 = \underline{\quad}$
 $\underline{\quad} \div 11 = 13$

6. $\underline{\quad} \times 9 = 9$
 $9 \div 9 = \underline{\quad}$
 $9 \times \underline{\quad} = 9$
 $9 \div \underline{\quad} = 9$

PRACTICE - B



IS THE DIVISION GETTING EASIER? JUST REMEMBER, PRACTICE MAKES PERFECT.

I KNOWS 5 TIMES 13 EQUALS 65, SO 65 DIVIDED BYES 13 MUST EQUALS 5.

$$65 = 13 \times 5$$

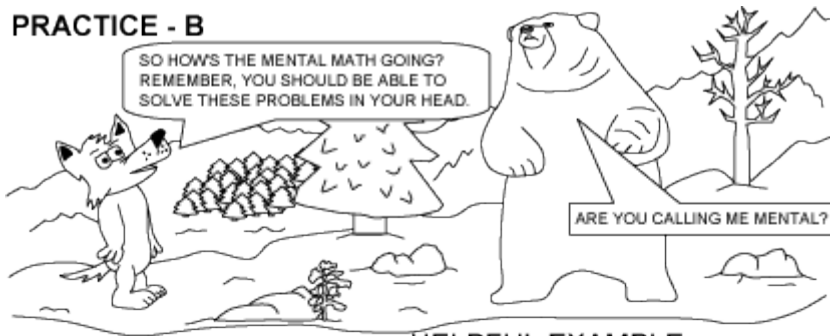
$$65 \div 13 = \boxed{?}$$

$$\boxed{?} = 5$$



- | | |
|---------------------------|---------------------------|
| 1. $132 \div 12 =$ _____ | 2. $42 \div 7 =$ _____ |
| 3. $15 \div 3 =$ _____ | 4. $104 \div 13 =$ _____ |
| 5. $12 \div 4 =$ _____ | 6. $8 \div 1 =$ _____ |
| 7. $56 \div 7 =$ _____ | 8. $20 \div 2 =$ _____ |
| 9. $81 \div 9 =$ _____ | 10. $96 \div 8 =$ _____ |
| 11. $120 \div 12 =$ _____ | 12. $27 \div 3 =$ _____ |
| 13. $20 \div 4 =$ _____ | 14. $72 \div 12 =$ _____ |
| 15. $0 \div 6 =$ _____ | 16. $35 \div 5 =$ _____ |
| 17. $8 \div 4 =$ _____ | 18. $77 \div 7 =$ _____ |
| 19. $72 \div 8 =$ _____ | 20. $117 \div 13 =$ _____ |
| 21. $77 \div 11 =$ _____ | 22. $36 \div 9 =$ _____ |
| 23. $72 \div 6 =$ _____ | 24. $84 \div 12 =$ _____ |
| 25. $27 \div 9 =$ _____ | 26. $108 \div 9 =$ _____ |
| 27. $11 \div 1 =$ _____ | 28. $56 \div 7 =$ _____ |
| 29. $60 \div 10 =$ _____ | 30. $12 \div 4 =$ _____ |
| 31. $9 \div 9 =$ _____ | 32. $24 \div 12 =$ _____ |
| 33. $10 \div 2 =$ _____ | 34. $18 \div 9 =$ _____ |
| 35. $27 \div 3 =$ _____ | 36. $40 \div 4 =$ _____ |
| 37. $48 \div 6 =$ _____ | 38. $64 \div 8 =$ _____ |

PRACTICE - B



HELPFUL EXAMPLE

THIS IS TRICKY BECAUSE YOU'RE DIVIDING 40 BY 8, WHICH ONLY LEAVES TWO 0'S TO PUT AT THE END.

$$4,000 \div 8 = 500$$

1. $600 \div 10 = \square \square$
2. $20,000 \div 5 = \underline{\hspace{2cm}}$
3. $3,500 \div 7 = \underline{\hspace{2cm}}$
4. $300 \div 6 = \underline{\hspace{2cm}}$
5. $4,000 \div 4 = \underline{\hspace{2cm}}$
6. $7,200 \div 9 = \underline{\hspace{2cm}}$
7. $300 \div 5 = \underline{\hspace{2cm}}$
8. $15,000 \div 5 = \underline{\hspace{2cm}}$
9. $1,000 \div 10 = \underline{\hspace{2cm}}$
10. $8,800 \div 11 = \underline{\hspace{2cm}}$
11. $440 \div 4 = \underline{\hspace{2cm}}$
12. $600 \div 12 = \underline{\hspace{2cm}}$
13. $2,800 \div 7 = \underline{\hspace{2cm}}$
14. $20,000 \div 4 = \underline{\hspace{2cm}}$
15. $500 \div 5 = \underline{\hspace{2cm}}$
16. $400 \div 1 = \underline{\hspace{2cm}}$

DIRECTIONS:

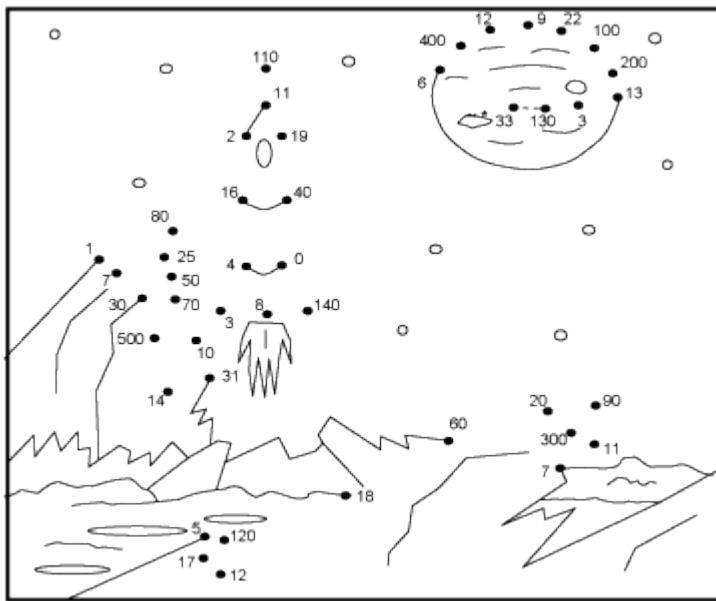
NAME: _____

ANSWER THE PROBLEMS BELOW AND CONNECT THE DOTS IN THE ORDER YOU CREATED.

I STARTED THE PATTERN FOR YOU...NOW YOU DO THE REST. BE CAREFUL SOME NUMBERS REPEAT.

NOTE: PATTERNS ARE NOT CONNECTED TOGETHER.

| PATTERN #1 | PATTERN #2 | PATTERN #3 | PATTERN #4 |
|----------------------|-----------------|------------------|------------------|
| 66 ÷ 2 = <u>33</u> | 440 ÷ 4 = _____ | 21 ÷ 3 = _____ | 16 ÷ 16 = _____ |
| 390 ÷ 3 = <u>130</u> | 99 ÷ 9 = _____ | 143 ÷ 13 = _____ | 63 ÷ 9 = _____ |
| 27 ÷ 9 = _____ | 38 ÷ 2 = _____ | 600 ÷ 2 = _____ | 480 ÷ 6 = _____ |
| 78 ÷ 6 = _____ | 120 ÷ 3 = _____ | 360 ÷ 4 = _____ | 50 ÷ 2 = _____ |
| 800 ÷ 4 = _____ | 0 ÷ 17 = _____ | 220 ÷ 11 = _____ | 600 ÷ 12 = _____ |
| 500 ÷ 5 = _____ | 280 ÷ 2 = _____ | 420 ÷ 7 = _____ | 150 ÷ 5 = _____ |
| 44 ÷ 2 = _____ | 56 ÷ 7 = _____ | 36 ÷ 2 = _____ | 490 ÷ 7 = _____ |
| 99 ÷ 11 = _____ | 12 ÷ 4 = _____ | 144 ÷ 12 = _____ | 500 ÷ 1 = _____ |
| 84 ÷ 7 = _____ | 48 ÷ 12 = _____ | 17 ÷ 1 = _____ | 110 ÷ 11 = _____ |
| 800 ÷ 2 = _____ | 32 ÷ 2 = _____ | 360 ÷ 3 = _____ | 28 ÷ 2 = _____ |
| 24 ÷ 4 = _____ | 16 ÷ 8 = _____ | 65 ÷ 13 = _____ | 62 ÷ 2 = _____ |
| LINE ENDS | LINE ENDS | LINE ENDS | LINE ENDS |



FAMILIES



FILL IN THE BLANKS TO
MAKE THE EQUATIONS
CORRECT.

MULTIPLICATION AND DIVISION FAMILY

$$2 \times 5 = 10 \quad 10 \div 5 = 2$$

$$5 \times 2 = 10 \quad 10 \div 2 = 5$$

1. $16 \div 4 = \square$
2. $3 \times \square = 9$
3. $6 \times 7 = \square$
4. $16 \div \square = 4$
5. $\square \times 2 = 8$
6. $24 \div 6 = \square$
7. $0 \times 10 = \square$
8. $11 \times \square = 66$
9. $6 \div \square = 2$
10. $32 \div \square = 4$
11. $45 \div 5 = \square$
12. $\square \times 6 = 36$
13. $\square \div 3 = 5$
14. $8 \times \square = 88$
15. $18 \div \square = 9$
16. $7 \times \square = 49$
17. $\square \times 3 = 36$
18. $49 \div 7 = \square$
19. $\square \div 6 = 3$
20. $\square \times 12 = 48$
21. $\square \div 1 = 3$
22. $30 \div \square = 6$
23. $13 \times 4 = \square$
24. $7 \times 8 = \square$
25. $\square \times 11 = 99$
26. $14 \div \square = 7$
27. $12 \times \square = 96$
28. $24 \div \square = 8$
29. $\square \times 8 = 64$
30. $\square \div 5 = 7$
31. $42 \div 6 = \square$
32. $6 \times \square = 42$
33. $7 \times 6 = \square$
34. $\square \times 4 = 52$
35. $\square \div 13 = 3$
36. $9 \times \square = 81$
37. $6 \div \square = 2$
38. $0 \div 7 = \square$
39. $\square \times 7 = 28$
40. $96 \div 8 = \square$
41. $1 \times \square = 13$
42. $99 \div 9 = \square$

OTHER WAYS OF WRITING DIVISION

YOU KNOW, REVIEWING LIKE THAT REALLY HELPS ME.



SO YOU'RE READY? DO YOU REMEMBER THE TWO OTHER WAYS OF WRITING DIVISION? TAKE A LOOK AT THE PROBLEMS BELOW.



SO ALL OF THESE MEAN 21 DIVIDED BY 7, WHICH EQUALS 3?



$$21 \div 7 \quad 7 \overline{)21} \quad \frac{21}{7}$$



YES... VERY GOOD POE. EVEN THOUGH THEY ARE WRITTEN DIFFERENTLY, THEY MEAN THE EXACT SAME THING.

I CAN SEE HOW THIS CAN GET CONFUSING.



IN THE BEGINNING, IT'S VERY CONFUSING. BUT WITH A LITTLE PRACTICE IT WILL GET EASIER AND EASIER TO RECOGNIZE THE DIFFERENT WAYS TO DIVIDE.



SO LET'S PRACTICE!

PRACTICE PROBLEMS



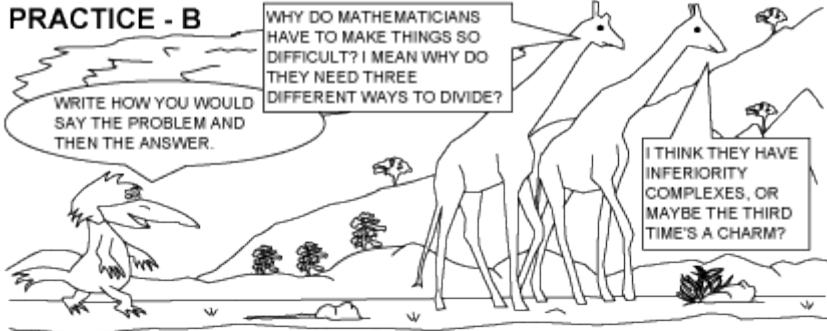
$$\begin{aligned} 48 \div 4 &= \underline{\quad 12 \quad} \\ 4 \overline{)48} &= \underline{\quad 12 \quad} \\ \frac{48}{4} &= \underline{\quad 12 \quad} \end{aligned}$$

$$\begin{aligned} 35 \div 7 &= \underline{\quad \quad} \\ \frac{35}{7} &= \underline{\quad \quad} \\ 7 \overline{)35} &= \underline{\quad \quad} \end{aligned}$$

$$\begin{aligned} \frac{33}{3} &= \underline{\quad \quad} \\ 33 \div 3 &= \underline{\quad \quad} \\ 3 \overline{)33} &= \underline{\quad \quad} \end{aligned}$$

$$\begin{aligned} 72 \div 8 &= \underline{\quad \quad} \\ 8 \overline{)72} &= \underline{\quad \quad} \\ \frac{72}{8} &= \underline{\quad \quad} \end{aligned}$$

PRACTICE - B



| | <i>HOW YOU SAY THE PROBLEM</i> | <i>ANSWER</i> |
|-----|--|-------------------------|
| 1. | $22 \div 2 \rightarrow$ <u>22 DIVIDED BY 2 EQUALS</u> | \rightarrow <u>11</u> |
| 2. | $9 \overline{)45} \rightarrow$ <u>45 DIVIDED BY 9 EQUALS</u> | \rightarrow <u>5</u> |
| 3. | $\frac{28}{4} \rightarrow$ <u>28 DIVIDED BY 4 EQUALS</u> | \rightarrow <u>?</u> |
| 4. | $\frac{40}{4} \rightarrow$ _____ | \rightarrow _____ |
| 5. | $7 \overline{)49} \rightarrow$ _____ | \rightarrow _____ |
| 6. | $48 \div 8 \rightarrow$ _____ | \rightarrow _____ |
| 7. | $\frac{60}{5} \rightarrow$ _____ | \rightarrow _____ |
| 8. | $7 \overline{)91} \rightarrow$ _____ | \rightarrow _____ |
| 9. | $\frac{12}{2} \rightarrow$ _____ | \rightarrow _____ |
| 10. | $63 \div 9 \rightarrow$ _____ | \rightarrow _____ |
| 11. | $4 \overline{)40} \rightarrow$ _____ | \rightarrow _____ |
| 12. | $\frac{26}{2} \rightarrow$ _____ | \rightarrow _____ |
| 13. | $33 \div 11 \rightarrow$ _____ | \rightarrow _____ |

PRACTICE - C

1. $28 \div 7 = \underline{\quad}$ 2. $4\overline{)28} = \underline{\quad}$ 3. $18 \div 2 = \underline{\quad}$

4. $90 \div 9 = \underline{\quad}$ 5. $\frac{55}{5} = \underline{\quad}$ 6. $36 \div 6 = \underline{\quad}$

7. $4\overline{)32} = \underline{\quad}$ 8. $\frac{64}{8} = \underline{\quad}$ 9. $3\overline{)27} = \underline{\quad}$

10. $16 \div 2 = \underline{\quad}$ 11. $52 \div 4 = \underline{\quad}$ 12. $\frac{42}{6} = \underline{\quad}$

13. $5\overline{)45} = \underline{\quad}$ 14. $39 \div 3 = \underline{\quad}$ 15. $\frac{30}{3} = \underline{\quad}$

16. $88 \div 8 = \underline{\quad}$ 17. $\frac{21}{7} = \underline{\quad}$ 18. $2\overline{)26} = \underline{\quad}$

19. $\frac{49}{7} = \underline{\quad}$ 20. $9\overline{)54} = \underline{\quad}$ 21. $32 \div 8 = \underline{\quad}$

22. $\frac{90}{9} = \underline{\quad}$ 23. $21 \div 3 = \underline{\quad}$ 24. $8\overline{)96} = \underline{\quad}$

25. $6\overline{)78} = \underline{\quad}$ 26. $\frac{45}{5} = \underline{\quad}$ 27. $\frac{20}{4} = \underline{\quad}$

28. $\frac{72}{9} = \underline{\quad}$ 29. $77 \div 7 = \underline{\quad}$ 30. $4\overline{)48} = \underline{\quad}$

31. $\frac{56}{7} = \underline{\quad}$ 32. $\frac{24}{3} = \underline{\quad}$ 33. $24 \div 3 = \underline{\quad}$

34. $5\overline{)65} = \underline{\quad}$ 35. $42 \div 7 = \underline{\quad}$ 36. $\frac{36}{9} = \underline{\quad}$

37. $\frac{91}{7} = \underline{\quad}$ 38. $28 \div 2 = \underline{\quad}$ 39. $6\overline{)48} = \underline{\quad}$

40. $8\overline{)88} = \underline{\quad}$ 41. $6\overline{)54} = \underline{\quad}$ 42. $\frac{42}{6} = \underline{\quad}$

DIRECTIONS:

NAME: _____

ANSWER THE PROBLEMS BELOW AND CONNECT THE DOTS IN THE ORDER YOU CREATED.

I STARTED THE PATTERN FOR YOU...NOW YOU DO THE REST. BE CAREFUL SOME NUMBERS REPEAT.

NOTE: PATTERNS ARE NOT CONNECTED TOGETHER.

| PATTERN #1 | PATTERN #2 | PATTERN #3 | PATTERN #4 |
|---------------------|-----------------|------------------|------------------|
| 120 ÷ 4 = <u>30</u> | 500 ÷ 1 = _____ | 600 ÷ 3 = _____ | 48 ÷ 12 = _____ |
| 420 ÷ 6 = <u>70</u> | 70 ÷ 7 = _____ | 56 ÷ 8 = _____ | 500 ÷ 5 = _____ |
| 39 ÷ 13 = _____ | 28 ÷ 2 = _____ | 110 ÷ 10 = _____ | 560 ÷ 7 = _____ |
| 104 ÷ 8 = _____ | 54 ÷ 9 = _____ | 45 ÷ 3 = _____ | 32 ÷ 2 = _____ |
| 80 ÷ 4 = _____ | 40 ÷ 5 = _____ | 160 ÷ 4 = _____ | 200 ÷ 4 = _____ |
| 360 ÷ 6 = _____ | 660 ÷ 6 = _____ | 24 ÷ 12 = _____ | 720 ÷ 8 = _____ |
| 44 ÷ 2 = _____ | 300 ÷ 2 = _____ | 50 ÷ 2 = _____ | 60 ÷ 12 = _____ |
| 63 ÷ 7 = _____ | 150 ÷ 2 = _____ | 910 ÷ 7 = _____ | 48 ÷ 4 = _____ |
| 13 ÷ 13 = _____ | 30 ÷ 6 = _____ | 19 ÷ 1 = _____ | 34 ÷ 2 = _____ |
| 42 ÷ 2 = _____ | 900 ÷ 3 = _____ | 800 ÷ 2 = _____ | 600 ÷ 5 = _____ |
| 0 ÷ 29 = _____ | 280 ÷ 2 = _____ | 36 ÷ 2 = _____ | 117 ÷ 13 = _____ |
| LINE ENDS | LINE ENDS | LINE ENDS | LINE ENDS |

