Multiplication/Division 0, 1, and numbers divided by themselves

This packet can help you learn these multiplication facts and the division facts (on the back) that go with them.

Contents:

Instruction:

- Strategy tips: 0s & 1s

Games:

- No Mercy

Flash Cards:

- 0-Fact Multiplication
- Dividing into 0
- 1-Fact Multiplication
- 1-Fact Division

X	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

Printing: Black & White, landscape, 2-sided, flip on short edge.

0 ÷ 1 = 0	0 ÷ 2= 0	0 ÷ 3 = 0	0 ÷ 4 = 0	0 ÷ 5 = 0
1 ÷ 1 = 1	2 ÷ 2 = 1	3 ÷ 3 = 1	4 ÷ 4= 1	5 ÷ 5 = 1
2 ÷ 1 = 2	4 ÷ 2 = 2	6 ÷ 3 = 2	8 ÷ 4 = 2	10 ÷ 5 = 2
3 ÷ 1 = 3	6 ÷ 2 = 3	9 ÷ 3 = 3	12 ÷ 4 = 3	15 ÷ 5 = 3
4 ÷ 1 = 4	8 ÷ 2 = 4	12 ÷ 3 = 4	16 ÷ 4 = 4	20 ÷ 5 = 4
5 ÷ 1 = 5	10 ÷ 2 = 5	15 ÷ 3 = 5	20 ÷ 4 = 5	25 ÷ 5 = 5
6 ÷ 1 = 6	12 ÷ 2 = 6	18 ÷ 3 = 6	24 ÷ 4 = 6	30 ÷ 5 = 6
7 ÷ 1 = 7	14 ÷ 2 = 7	21 ÷ 3 = 7	28 ÷ 4 = 7	35 ÷ 5 = 7
8 ÷ 1 = 8	16 ÷ 2 = 8	24 ÷ 3 = 8	32 ÷ 4 = 8	40 ÷ 5 = 8
9 ÷ 1 = 9	18 ÷ 2 = 9	27 ÷ 3 = 9	36 ÷ 4 = 9	45 ÷ 5 = 9
10 ÷ 1 = 10	20 ÷ 2 = 10	30 ÷ 3 = 10	40 ÷ 4 = 10	50 ÷ 5 = 10
0 ÷ 6 = 0	0 ÷ 7 = 0	0 ÷ 8 = 0	0 ÷ 9 = 0	0 ÷ 10 = 0
6 ÷ 6 = 1	7 ÷ 7 = 1	8 ÷ 8 = 1	9 ÷ 9 = 1	10 ÷ 10 = 1
12 ÷ 6 = 2	14 ÷ 7 = 2	16 ÷ 8 = 2	18 ÷ 9 = 2	20 ÷ 10 = 2
18 ÷ 6 = 3	21 ÷ 7 = 3	24 ÷ 8 = 3	27 ÷ 9 = 3	30 ÷ 10 = 3
24 ÷ 6 = 4	28 ÷ 7 = 4	32 ÷ 8 = 4	36 ÷ 9 = 4	40 ÷ 10 = 4
30 ÷ 6 = 5	35 ÷ 7 = 5	40 ÷ 8 = 5	45 ÷ 9 = 5	50 ÷ 10 = 5
36 ÷ 6 = 6	42 ÷ 7 = 6	48 ÷ 8 = 6	54 ÷ 9 = 6	60 ÷ 10 = 6
42 ÷ 6= 7	49 ÷ 7 = 7	56 ÷ 8 = 7	63 ÷ 9 = 7	70 ÷ 10 = 7
48 ÷ 6 = 8	56 ÷ 7 = 8	64 ÷ 8 = 8	72 ÷ 9 = 8	80 ÷ 10 = 8
54 ÷ 6 = 9	63 ÷ 7 = 9	72 ÷ 8 = 9	81 ÷ 9 = 9	90 ÷ 10 = 9
60 ÷ 6 = 10	70 ÷ 7 = 10	80 ÷ 8 = 10	90 ÷ 9 = 10	100 ÷ 10 = 10

Strategy tips: Multiplying/Dividing by 1, Dividing a number by itself, and using 0

Multiplying or Dividing by 1 – Multiplying or dividing by 1 is easy, because a number multiplied or divided by 1 is always…itself. Here are the X1 and ÷1 facts you need to know.

1 X 1 = 1	2 X 1 = 2	3 X 1 = 3	4 X 1 = 4	5 X 1 = 5	6 X 1 = 6	7 X 1 =7	8 X 1 = 8	9 X 1 = 9	10 X 1 = 10
1 ÷ 1 = 1	2 ÷ 1 = 2	3 ÷ 1 = 3	4 ÷ 1 = 4	5 ÷ 1 = 5	6 ÷ 1 = 6	7 ÷ 1 =7	8 ÷ 1 = 8	9 ÷ 1 = 9	10 ÷ 1 = 10

Dividing a number by itself - Dividing a number by itself is also easy – the answer is always 1. How many groups of 3 can you make from 3? Only 1 of course! Now you know all these division facts:

1 ÷ 1 = 1	2 ÷ 2 = 1	3 ÷ 3 = 1	4 ÷ 4 = 1	5 ÷ 5 = 1	6 ÷ 6 = 1	7 ÷ 7 =1	8 ÷ 8 = 1	9 ÷ 9 = 1	10 ÷ 10 = 1

Using 0 – When you multiply any number by 0 the answer is always 0. Zero sets of a number is 0.

It is important to remember that you CAN NOT DIVIDE BY 0. Think about it … how many times could you take nothing (0) out of a group of 3? Try it! You will see the question does not even make sense! So, if you see a problem like this: 12 ÷ 0 = ? -- then you know either something is wrong, or someone is playing a trick on you!

You CAN divide into 0. Think about it… how many times can you take 3 out of 0? 0 times of course! So, 0 times any number is always 0 and 0 divided by any number is always 0. For example: 0 ÷ 6 = 0, 0 ÷ 10 = 0…. 0 ÷ 5,875?...still 0!

1 X 0 = 0	2 X 0 = 0	3 X 0 = 0	4 X 0 = 0	5 X 0 = 0	6 X 0 = 0	7 X 0 =0	8 X 0 = 0	9 X 0 = 0	10 X 0 = 0
0 ÷ 1 = 0	0 ÷ 2 = 0	0 ÷ 3 = 0	0 ÷ 4 = 0	0 ÷ 5 = 0	0 ÷ 6 = 0	0 ÷ 7 =0	0 ÷ 8 = 0	0 ÷ 9 = 0	0 ÷ 10 = 0

Here are a few problems to practice the strategies you just learned.

$0 \div 10 =$	$4 \div 4 =$	$8 \div 1 =$
$7 \div 1 =$	$6 \div 6 =$	$0 \div 5 =$

No Mercy

2	3	4
5	6	7
8	9	10

No Mercy

2	3	4
5	6	7
8	9	10

No Mercy

Materials needed:
- 10-sided die (0 = 10)
- A set of “No Mercy” Instruction cards – Well Shuffled
- Game counters – 20 or so for each player
- “No Mercy” game board – 1 for each player

To play:
Players take turns rolling the die and then drawing a “no mercy” card and following the instructions using the number rolled.

Players must say the problem and the answer out loud. For example: 5 ÷ 5 = 1. Put the instruction card back at the bottom of the stack.

If the answer is a number on his/her game board, the player covers the number with one of his/her game counters. If the number is already covered, add another counter to the same number.

If the answer is 1 – You can remove 1 counter from another player’s game board.

If the answer is 0 – You must remove 1 counter from your own game board. (That’s where the extras can come in handy.)

To win: The first player to get 3 in a row in any direction wins. Or you can play “black out” for a longer game.

For a slightly different game… both players play on the same game board with two different color counters. If you get a number that is already covered by another player, you can bump them off. 1 = remove one of their counters. 0 = remove one of your own counters.

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Divide your number by 1. ___÷ 1 = ___	Divide your number by 1. ___÷ 1 = ___	Divide your number by 1. ___÷ 1 = ___
Divide your number by 1. ___÷ 1 = ___	Divide your number by 1. ___÷ 1 = ___	Divide your number by 1. ___÷ 1 = ___
Divide your number by 1. ___÷ 1 = ___	Divide your number by itself. ___ ÷ ___ = ___	Divide 0 by your number. 0 ÷ ___ = ___

Multiply your number by 1. ___ X 1 = ___	Multiply your number by 1. ___ X 1 = ___	Multiply your number by 1. ___ X 1 = ___
Multiply your number by 1. ___ X 1 = ___	Multiply your number by 1. ___ X 1 = ___	Multiply your number by 1. ___ X 1 = ___
Multiply your number by 1. ___ X 1 = ___	Divide your number by itself. ___ ÷ ___ = ___	Multiply your number by 0. ___ X 0 = ___

$0 \div 1 =$	$1 \div 1 =$	$2 \div 1 =$
Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself
$3 \div 1 =$	$4 \div 1 =$	$5 \div 1 =$
Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself
$6 \div 1 =$	$7 \div 1 =$	$8 \div 1 =$
Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself

$9 \div 1 =$	$10 \div 1 =$	$0 \div 1 =$
Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself
$0 \div 2 =$	$0 \div 3 =$	$0 \div 4 =$
Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself
$0 \div 5 =$	$0 \div 6 =$	$0 \div 7 =$
Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself

0 ÷ 8 = Mult/Div: 0,1, number by itself	**0 ÷ 9 =** Mult/Div: 0,1, number by itself	**0 ÷ 10 =** Mult/Div: 0,1, number by itself
0 X 1 = Mult/Div: 0,1, number by itself	**0 X 2 =** Mult/Div: 0,1, number by itself	**0 X 3 =** Mult/Div: 0,1, number by itself
0 X 4 = Mult/Div: 0,1, number by itself	**0 X 5 =** Mult/Div: 0,1, number by itself	**0 X 6 =** Mult/Div: 0,1, number by itself

0 X 7 = Mult/Div: 0,1, number by itself	**0 X 8 =** Mult/Div: 0,1, number by itself	**0 X 9 =** Mult/Div: 0,1, number by itself
0 X 10 = Mult/Div: 0,1, number by itself	**1 X 1 =** Mult/Div: 0,1, number by itself	**1 X 2 =** Mult/Div: 0,1, number by itself
1 X 3 = Mult/Div: 0,1, number by itself	**1 X 4 =** Mult/Div: 0,1, number by itself	**1 X 5 =** Mult/Div: 0,1, number by itself

1 X 6 = Mult/Div: 0,1, number by itself	**1 X 7 =** Mult/Div: 0,1, number by itself	**1 X 8 =** Mult/Div: 0,1, number by itself
1 X 9 = Mult/Div: 0,1, number by itself	**1 X 10 =** Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself
Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself	Mult/Div: 0,1, number by itself