

Answer Booklet

Year 3 Maths:

Year 3 Programme of Study: Multiplication and Division

Statutory Requirements	Worksheet	Page Number	Notes
Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Multiplication 4 times tables word search	3	
	Multiplication 3 times tables word search	4	
	Multiplication 8 times tables word search	5	
	Dividing by 3 race	6	
	Dividing by 4 race	7	
	Dividing by 8 race	8	
	Tables at the Double	9	
	Multiplication triangles activity sheet 3, 4 and 8 times tables	10 - 11	
Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.	Mental Multiplication	12	
	Multiplying 2-digit numbers by 1-digit numbers using grid method	13	
	New bus stop method formal division of 2-digit numbers	14	
	Division using a numberline	15 - 17	

Word Search 4 Times Table: Answers

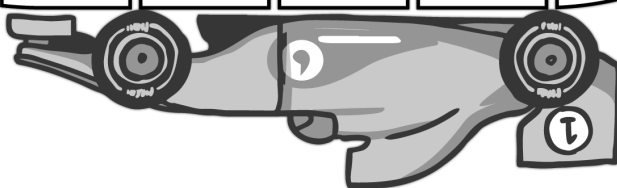
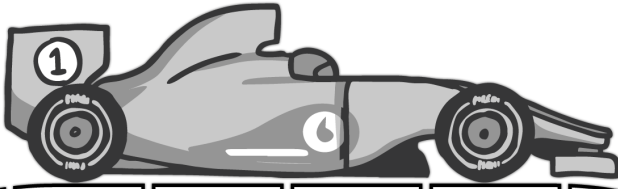
question	answer									
	f	t	h	i	r	t	y	t	w	o
	t	o	h	f	o	r	t	y	w	o
	w	t	r	s	i	x	e	e	t	e
	e	w	r	t	e	s	e	s	h	i
	l	s	e	l	y	n	l	h	i	g
	v	k	i	e	t	f	e	e	r	h
	e	a	e	y	e	a	o	t	t	t
	f	o	r	t	e	o	o	u	y	e
	o	n	n	e	e	t	h	g	r	e
	s	i	x	t	e	e	n	b	n	n

Word Search 3 Times Table: Answers

question	answer									
	e	t	h	i	r	t	y	n	e	l
	t	n	h	x	t	t	e	r	t	o
	w	i	u	e	d	b	i	w	n	e
	e	n	r	w	e	s	e	e	o	s
	l	e	e	l	p	n	e	h	u	i
	v	k	e	e	t	t	i	e	r	x
	e	a	e	y	h	a	u	t	n	e
	m	q	o	g	e	o	o	k	i	e
	o	n	i	e	e	t	h	g	n	e
	e	e	d	j	p	z	o	b	n	n

Word Search 8 Times Table: Answers

question	answer									
	t	o	e	v	e	n	e	y	i	e
	h	w	h	t	w	e	l	v	e	f
	i	t	e	e	d	b	g	n	o	i
	r	y	e	n	e	s	h	r	h	f
	t	t	e	e	t	y	t	e	i	t
	y	r	i	r	t	y	y	e	r	y
	t	i	y	t	r	o	f	t	t	s
	w	h	e	w	u	o	u	o	y	i
	o	t	o	o	e	t	e	o	u	x
	e	s	i	x	t	e	e	n	n	r

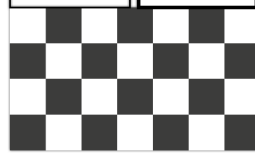


Division Race

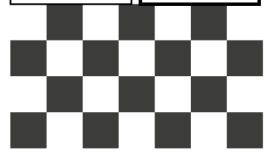
Take the number in the circle below and divide the numbers on the outside of the track by it. Write your answers as you go and see how long it takes you to finish the race!

Divide by
3

30	33	18	3	21	6	12	9	24	36
10	11	6	1	7	2	4	3	9	8
36	12	6	1	2	6	3	9	5	24
27	9	1	7	1	6	11	12	9	15
24	8	6	1	7	6	11	12	9	27
15	5	6	1	7	6	11	12	9	36
12	4	3	2	7	6	11	10	30	33
9	3	2	7	1	6	11	10	30	33



Start 

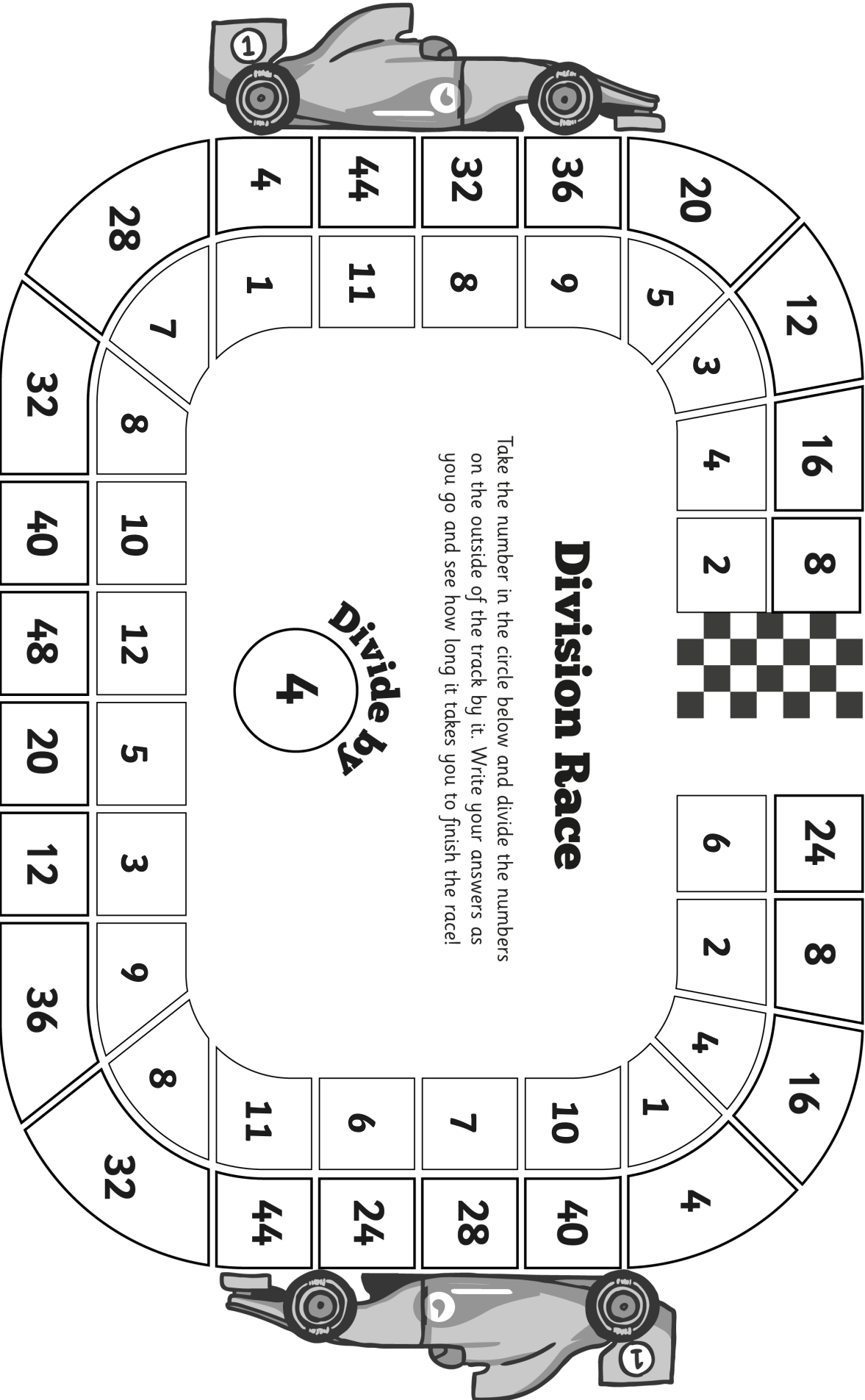


Division Race

Take the number in the circle below and divide the numbers on the outside of the track by it. Write your answers as you go and see how long it takes you to finish the race!

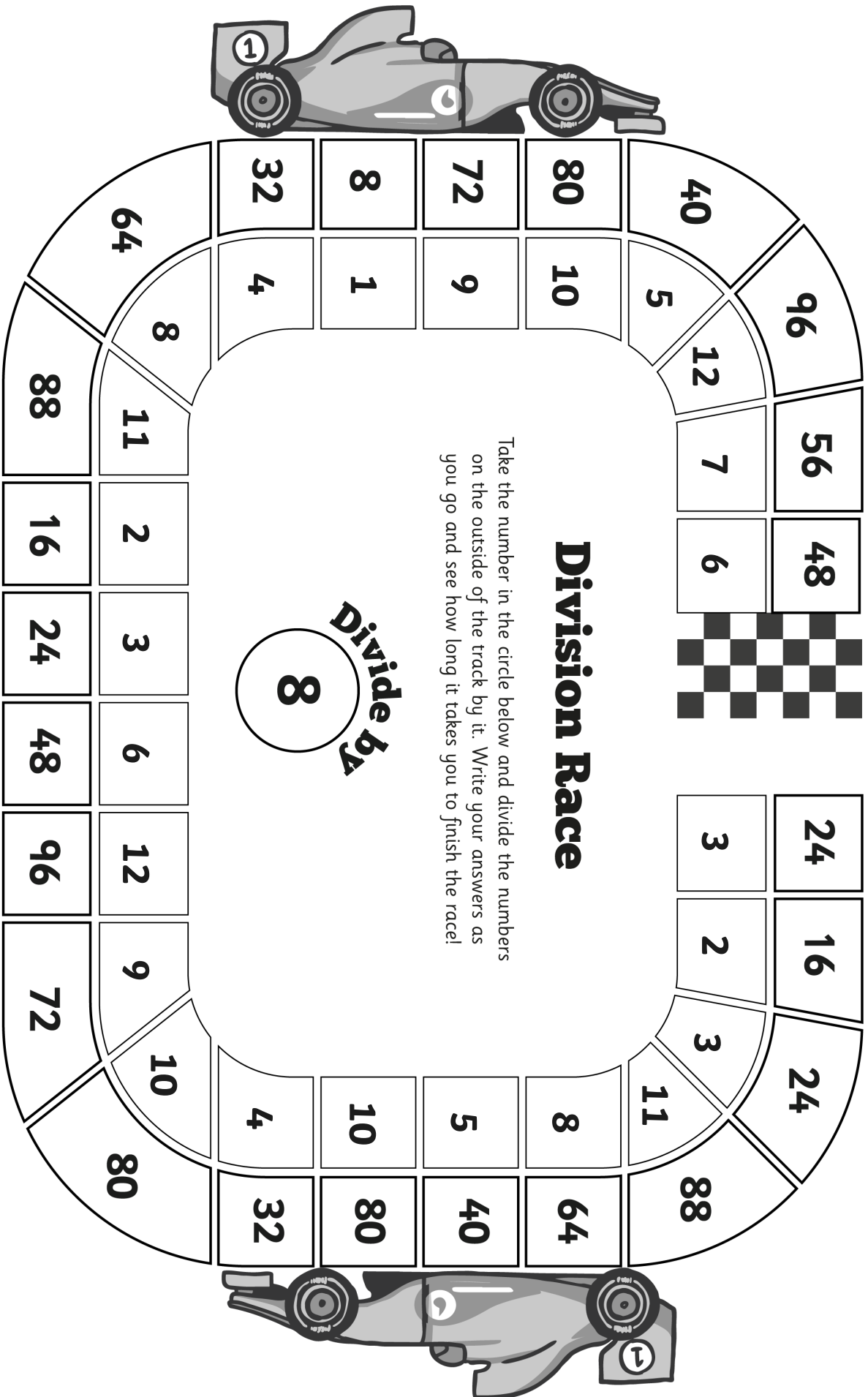
Divide by

4



A circular track with 36 numbered segments arranged in an oval shape. The numbers are: 20, 12, 16, 8, 24, 8, 16, 4, 3, 4, 2, 6, 2, 8, 4, 1, 16, 4, 5, 9, 11, 1, 7, 8, 10, 12, 5, 3, 9, 8, 32, 40, 48, 20, 12, 36, 11, 6, 7, 10, 40, 28, 44, 4, 1, 24, 44. A central circle contains the number 4. The text 'Divide by' is written around the circle. The track is flanked by two race cars, one at the top and one at the bottom.

Start 



Division Race

Take the number in the circle below and divide the numbers on the outside of the track by it. Write your answers as you go and see how long it takes you to finish the race!

Divide by
8

Tables at the Double: Answers

question	answer		
	x2	x4	x8
2	4	8	16
3	6	12	24
4	8	16	32
5	10	20	40
6	12	24	48
7	14	28	56
8	16	32	64
9	18	36	72
10	20	40	80
11	22	44	88
12	24	48	96
15	30	60	120
20	40	80	160
50	100	200	400
100	200	400	800

Multiplication Triangles Activity Sheet: Answers

1.

$$\begin{array}{c} 80 \\ \div \quad \div \\ 8 \quad \times \quad 10 \end{array}$$

2.

$$\begin{array}{c} 32 \\ \div \quad \div \\ 4 \quad \times \quad 8 \end{array}$$

3.

$$\begin{array}{c} 12 \\ \div \quad \div \\ 4 \quad \times \quad 3 \end{array}$$

4.

$$\begin{array}{c} 6 \\ \div \quad \div \\ 3 \quad \times \quad 2 \end{array}$$

5.

$$\begin{array}{c} 16 \\ \div \quad \div \\ 8 \quad \times \quad 2 \end{array}$$

6.

$$\begin{array}{c} 3 \\ \div \quad \div \\ 3 \quad \times \quad 1 \end{array}$$

7.

$$\begin{array}{c} 20 \\ \div \quad \div \\ 4 \quad \times \quad 5 \end{array}$$

8.

$$\begin{array}{c} 16 \\ \div \quad \div \\ 4 \quad \times \quad 4 \end{array}$$

9.

$$\begin{array}{c} 24 \\ \div \quad \div \\ 8 \quad \times \quad 3 \end{array}$$

10.

$$\begin{array}{c} 96 \\ \div \quad \div \\ 8 \quad \times \quad 12 \end{array}$$

11.

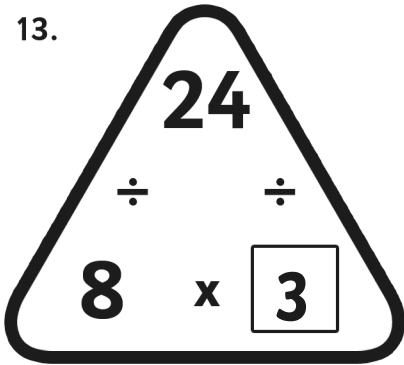
$$\begin{array}{c} 28 \\ \div \quad \div \\ 4 \quad \times \quad 7 \end{array}$$

12.

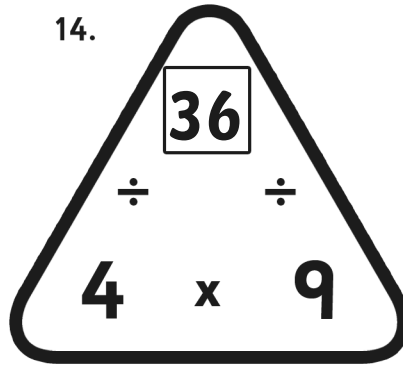
$$\begin{array}{c} 88 \\ \div \quad \div \\ 8 \quad \times \quad 11 \end{array}$$

Multiplication Triangles Activity Sheet: Answers

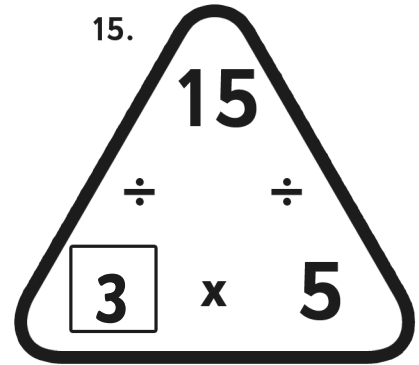
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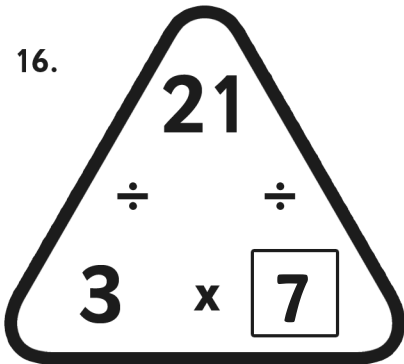
14.



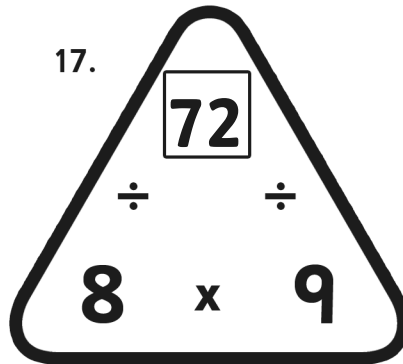
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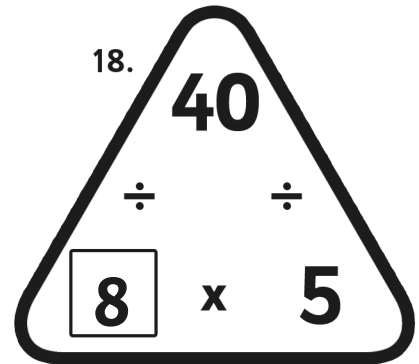
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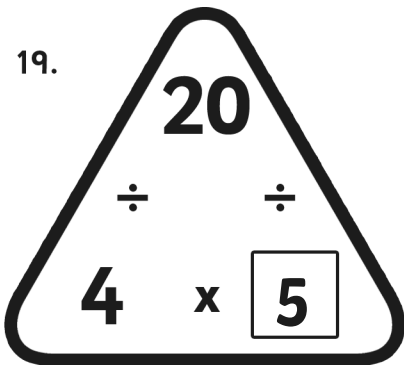
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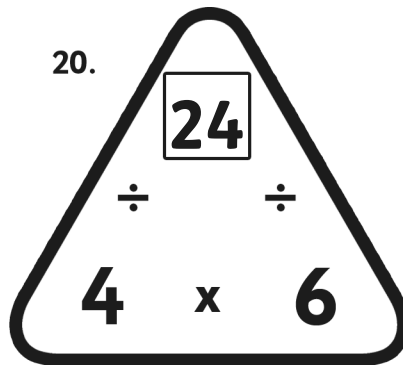
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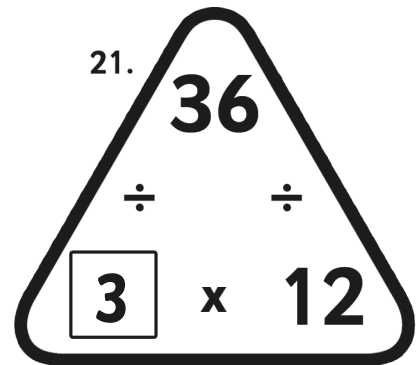
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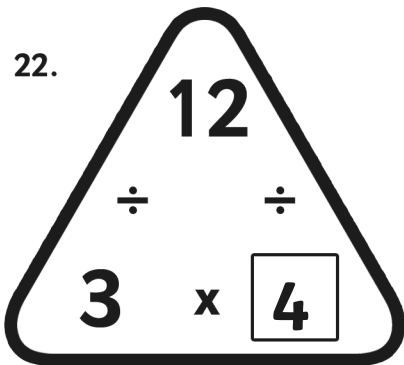
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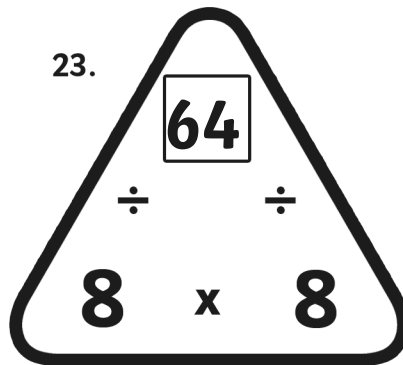
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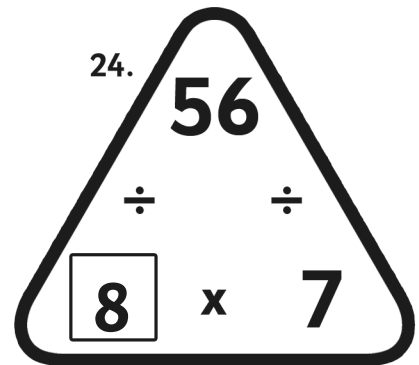
22.



23.



24.



Mental Multiplication: Answers

question	answer	question	answer
1	56	12	45
2	65	13	60
3	48	14	100
4	72	15	40
5	99	16	108
6	90	17	143
7	60	18	120
8	45	19	32
9	96	20	135
10	117	21	165
11	110	22	112

Multiplying 2-digit Numbers by 1-digit Numbers Using Grid Method: Answers

question	answer
1	$13 \times 9 = 117$
2	$71 \times 5 = 355$
3	$56 \times 5 = 280$
4	$23 \times 3 = 69$
5	$89 \times 9 = 801$
6	$63 \times 7 = 441$
7	$75 \times 9 = 675$
8	$13 \times 5 = 65$
9	$28 \times 9 = 252$
10	$53 \times 8 = 424$

New Bus Stop Method Formal Division of 2-Digit Numbers: Answers

question	answer
1	23
2	22
3	18
4	19
5	24
6	14
7	12
8	14
9	12
10	13
11	24
12	15
13	12
14	16
15	11
16	20
17	19
18	23
19	23
20	13
21	23
22	21
23	24
24	10
25	22
26	16
27	14
28	22
29	21
30	13





Division Using a Numberline: Answers

question	answer	question	answer
1	4	13	14
2	3	14	8
3	3	15	13
4	4	16	14
5	6	17	8
6	3	18	9
7	12	19	12
8	12	20	11
9	6	21	22
10	3	22	8
11	4	23	13
12	4	24	12

I'm Thinking of a Number: Answers

question	answer
1	9
2	44
3	40
4	8
5	4
6	36

Deriving Related Multiplication Facts From Known Multiplication Tables: Answers

question	answer			
	 lorry 1	 lorry 2	 lorry 3	 lorry 4
1	$3 \times 4 = 12$	$3 \times 40 = 120$	$4 \times 30 = 120$	$4 \times 3 = 12$
2	$3 \times 6 = 18$	$3 \times 60 = 180$	$6 \times 30 = 180$	$6 \times 3 = 18$
3	$3 \times 7 = 21$	$3 \times 70 = 210$	$7 \times 30 = 210$	$7 \times 3 = 21$
4	$4 \times 4 = 16$	$4 \times 40 = 160$	$40 \times 4 = 160$	$4 \times 4 = 16$
5	$4 \times 7 = 28$	$40 \times 7 = 280$	$7 \times 40 = 280$	$7 \times 4 = 28$
6	$3 \times 8 = 24$	$30 \times 8 = 240$	$8 \times 30 = 240$	$8 \times 3 = 24$
7	$4 \times 9 = 36$	$4 \times 90 = 360$	$9 \times 40 = 360$	$9 \times 4 = 36$
8	$8 \times 5 = 40$	$8 \times 50 = 400$	$5 \times 80 = 400$	$5 \times 8 = 40$
9	$8 \times 9 = 72$	$8 \times 90 = 720$	$9 \times 80 = 720$	$9 \times 8 = 72$
10	$8 \times 6 = 48$	$8 \times 60 = 480$	$6 \times 80 = 480$	$6 \times 8 = 48$

Multiplication Missing Numbers: Answers

question	answer	question	answer
1	$7 \times 5 = 35$	12	$8 \times 9 = 72$
2	$4 \times 4 = 16$	13	$3 \times 8 = 24$
3	$7 \times 8 = 56$	14	$12 \times 5 = 60$
4	$3 \times 6 = 18$	15	$2 \times 9 = 18$
5	$5 \times 8 = 40$	16	$12 \times 1 = 12$
6	$1 \times 8 = 8$	17	$9 \times 4 = 36$
7	$7 \times 4 = 28$	18	$3 \times 9 = 27$
8	$4 \times 8 = 32$	19	$6 \times 5 = 30$
9	$7 \times 4 = 28$	20	$5 \times 11 = 55$
10	$2 \times 11 = 22$	21	$5 \times 5 = 25$
11	$3 \times 2 = 6$		

Division Missing Numbers: Answers

question	answer	question	answer
1	$8 \div 4 = 2$	12	$20 \div 5 = 4$
2	$10 \div 5 = 2$	13	$27 \div 3 = 9$
3	$18 \div 3 = 6$	14	$18 \div 2 = 9$
4	$12 \div 4 = 3$	15	$28 \div 4 = 7$
5	$12 \div 3 = 4$	16	$48 \div 4 = 12$
6	$15 \div 5 = 3$	17	$40 \div 5 = 8$
7	$24 \div 8 = 3$	18	$22 \div 2 = 11$
8	$20 \div 5 = 4$	19	$30 \div 2 = 15$
9	$15 \div 3 = 5$	20	$33 \div 11 = 3$
10	$9 \div 3 = 3$	21	$21 \div 3 = 7$
11	$14 \div 2 = 7$		

Scaling Numbers: Answers

question	answer
1	21
2	5
3	40p
4	20
5	8
6	24p
7	Lisa: 4 Ned: 8 Mina: 16
8	36m

Colour the Division Equation: Answers

Round 1

15	6	8	60	5	12	1	12
5	1	5	7	16	4	23	12
3	21	4	9	7	3	1	1
8	3	20	10	2	17	16	1
4	1	1	5	3	16	2	8
32	18	9	2	2	4	7	2
25	3	15	3	4	4	4	16
18	6	1	6	9	13	9	14

Round 2

88	10	31	1	41	21	6	27
8	25	23	4	4	7	9	9
11	1	11	9	21	3	9	3
3	15	5	2	10	12	14	24
33	3	55	3	4	4	16	8
4	44	11	2	40	8	5	15
7	8	13	2	5	2	10	20
28	4	7	8	8	4	2	2

Round 3

24	12	2	1	3	7	14	35
21	17	4	9	8	10	2	5
19	20	8	4	32	2	7	7
6	10	2	20	11	5	5	25
5	5	4	5	15	3	1	3
4	2	3	6	2	36	5	2
4	18	9	10	13	12	2	6
16	16	3	27	9	14	12	15

Round 4

14	18	20	2	10	2	15	6
7	17	4	9	8	4	32	23
2	10	5	22	80	14	8	16
11	9	3	9	28	7	4	10
7	90	15	13	8	35	19	24
25	4	2	15	3	5	6	30
21	12	4	5	12	20	20	10
48	6	8	12	4	4	16	3