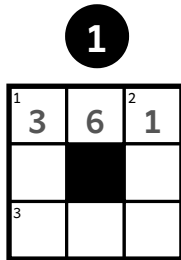




Learn a new puzzle

Cross-Number

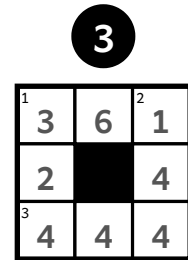
One digit in each white square. Every answer fits its clues.

Trick: **Share the digits**

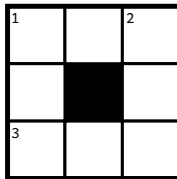
1 Across: a square number, digits add to 10. Only 361.



1 Down shares the 3. A square that starts with 3 and is a multiple of 6: 324.



2 Down starts with 1: 144. So 3 Across is 4_4: 444.

Try it**Across**

- 1 A multiple of 3.
Its digits add to 24.
- 3 Its digits add to 13.
It ends in 0.

Down

- 1 A prime number.
More than 948 and less than 970.
- 2 A square number.
Its digits add to 9.

The answer is with the other answers.

Talk about it: Ask: What is the difference between a digit and a number?

**1****Cross-Number**

Write one digit in each white square. Every answer is a number that fits its clue.



1		2		3
4	5			
	6		7	
8			9	
		10		

Across

- 2** Its digits add to 17.
A factor of 934.
- 4** It reads the same both ways.
More than 838 and less than 849.
- 6** A multiple of 6.
More than 871 and less than 880.
- 8** A prime number.
A factor of 134.
- 9** 7×11 .
- 10** A multiple of 4.
Its digits multiply to 48.

Down

- 1** Its digits add to 15.
A factor of 156.
- 2** A prime number.
A factor of 974.
- 3** Its digits add to 16.
Its digits go up from left to right.
- 5** A prime number.
A factor of 974.
- 7** Its digits add to 21.
More than 677 and less than 686.
- 8** A multiple of 4.
Its digits multiply to 48.

**2****Cross-Number**

Write one digit in each white square. Every answer is a number that fits its clue.



1	2		3	
	4			
5			6	7
		8		

Across

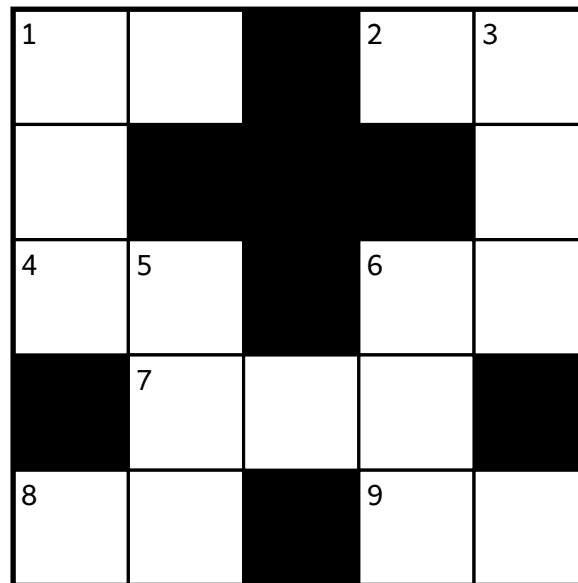
- 1** Its digits add to 17.
It ends in 8.
- 3** 7×7 .
- 4** Its digits add to 16.
More than 570 and less than 578.
- 5** 4×8 .
- 6** 6×8 .
- 8** Its digits multiply to 32.
Its digits go up from left to right.

Down

- 2** Its digits multiply to 80.
Its digits go down from left to right.
- 3** All its digits are the same.
It ends in 4.
- 5** A multiple of 12.
Its digits multiply to 54.
- 7** Its digits add to 20.
More than 843 and less than 871.

**3****Cross-Number**

Write one digit in each white square. Every answer is a number that fits its clue.

**Across**

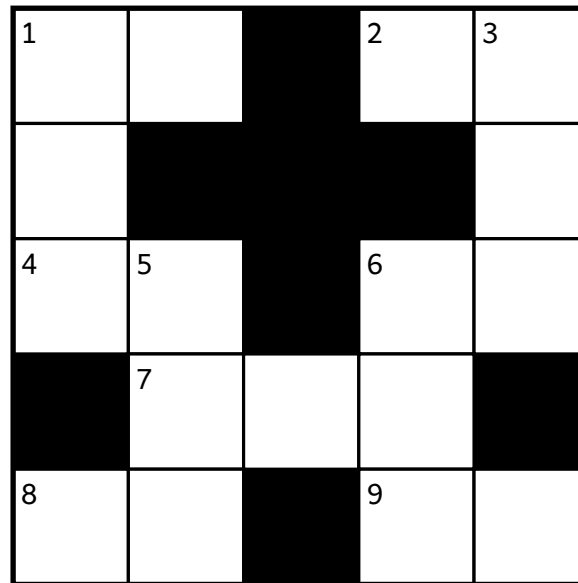
- 1 Its digits go down from left to right.
A factor of 166.
- 2 6×8 .
- 4 Its digits multiply to 9.
Its digits go up from left to right.
- 6 6×12 .
- 7 A multiple of 5.
Its digits multiply to 175.
- 8 Its digits add to 11.
A factor of 148.
- 9 Its digits go down from left to right.
A factor of 184.

Down

- 1 Its digits add to 10.
More than 809 and less than 822.
- 3 Its digits multiply to 80.
Its digits go down from left to right.
- 5 Its digits add to 20.
More than 971 and less than 984.
- 6 Its digits add to 21.
More than 749 and less than 763.

**4****Cross-Number**

Write one digit in each white square. Every answer is a number that fits its clue.

**Across**

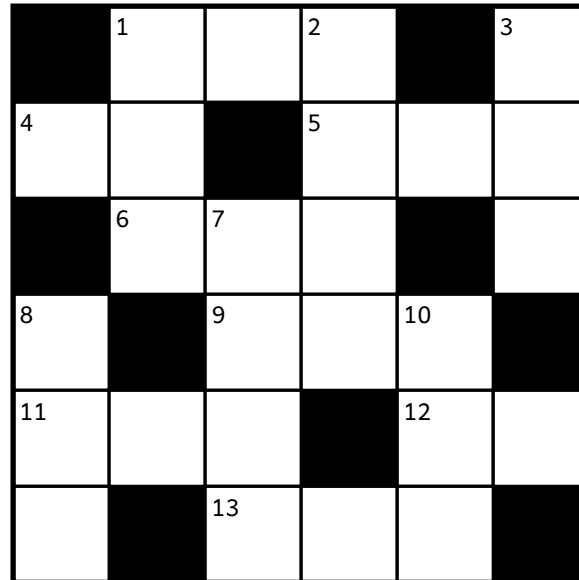
- 1** 3×11 .
- 2** A staircase number (1, 3, 6, 10, 15 ...).
More than 87 and less than 100.
- 4** Its digits multiply to 35.
Its digits go up from left to right.
- 6** 3×11 .
- 7** Its digits add to 12.
More than 606 and less than 626.
- 8** 5×7 .
- 9** 3×4 .

Down

- 1** A staircase number (1, 3, 6, 10, 15 ...).
A factor of 650.
- 3** Its digits add to 6.
Its digits go up from left to right.
- 5** A multiple of 9.
More than 763 and less than 777.
- 6** A staircase number (1, 3, 6, 10, 15 ...).
A factor of 702.

**5****Cross-Number**

Write one digit in each white square. Every answer is a number that fits its clue.

**Across**

- 1** A multiple of 7.
It starts with 6.
- 4** A multiple of 8.
Its digits add to 5.
- 5** Its digits multiply to 112.
Its digits go up from left to right.
- 6** Its digits add to 9.
More than 313 and less than 329.
- 9** A multiple of 4.
Its digits multiply to 90.
- 11** Its digits add to 26.
It reads the same both ways.
- 12** Its digits add to 8.
Its digits go down from left to right.
- 13** Its digits add to 16.
It starts with 2.

Down

- 1** A multiple of 7.
Its digits multiply to 36.
- 2** A multiple of 5.
Its digits multiply to 40.
- 3** Its digits add to 20.
It ends in 3.
- 7** It reads the same both ways.
It ends in 2.
- 8** It reads the same both ways.
More than 480 and less than 506.
- 10** Its digits go up from left to right.
A factor of 518.

**6****Cross-Number**

Write one digit in each white square. Every answer is a number that fits its clue.



1		2	3	4	
		5			
6	7				
			8		9
	10	11			
12					

Across

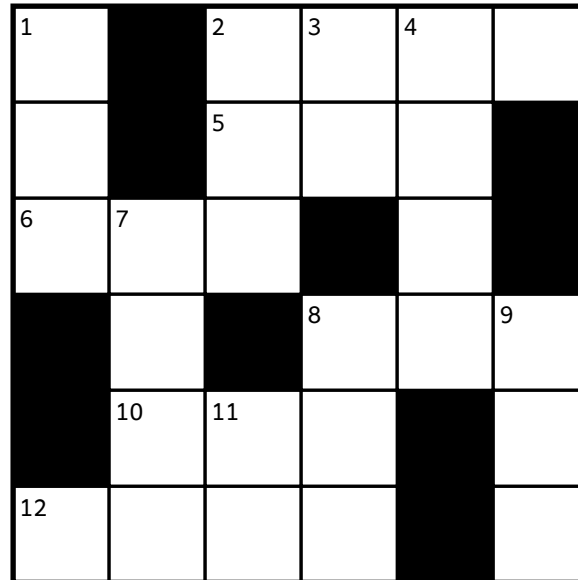
- 2** It reads the same both ways.
It ends in 6.
- 5** A multiple of 6.
A factor of 828.
- 6** Its digits add to 18.
Its digits multiply to 126.
- 8** Its digits add to 19.
Its digits go down from left to right.
- 10** Its digits multiply to 24.
Its digits go up from left to right.
- 12** A multiple of 10.
Its digits add to 21.

Down

- 1** Its digits add to 19.
More than 906 and less than 936.
- 2** Its digits multiply to 48.
Its digits go down from left to right.
- 3** Its digits multiply to 8.
Its digits go down from left to right.
- 4** Its digits add to 24.
It reads the same both ways.
- 7** A multiple of 9.
Its digits multiply to 196.
- 8** A multiple of 4.
More than 935 and less than 941.
- 9** A prime number.
Its digits multiply to 70.
- 11** A multiple of 5.
It starts with 3.

**7****Cross-Number**

Write one digit in each white square. Every answer is a number that fits its clue.

**Across**

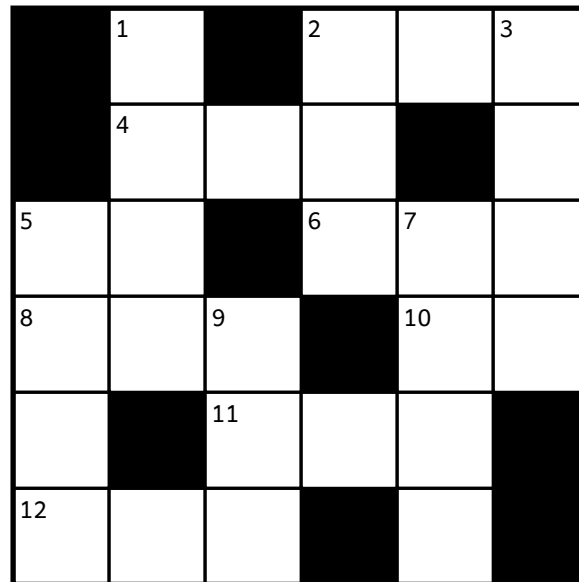
- 2** A staircase number (1, 3, 6, 10, 15 ...).
It starts with 6.
- 5** A prime number.
Its digits add to 23.
- 6** It reads the same both ways.
It starts with 3.
- 8** A multiple of 3.
Its digits multiply to 48.
- 10** A multiple of 5.
Its digits add to 6.
- 12** Its digits add to 21.
Its digits go down from left to right.

Down

- 1** Its digits add to 13.
More than 819 and less than 827.
- 2** Its digits multiply to 90.
Its digits go down from left to right.
- 3** A multiple of 3.
Its digits add to 12.
- 4** A staircase number (1, 3, 6, 10, 15 ...).
It starts with 2.
- 7** A square number.
It starts with 7.
- 8** Its digits add to 10.
It ends in 2.
- 9** Its digits add to 10.
A factor of 254.
- 11** A multiple of 7.
It ends in 4.

**8****Cross-Number**

Write one digit in each white square. Every answer is a number that fits its clue.

**Across**

- 2** Its digits add to 16.
More than 926 and less than 951.
- 4** Its digits add to 11.
More than 647 and less than 677.
- 5** Its digits add to 9.
A factor of 126.
- 6** It reads the same both ways.
A factor of 646.
- 8** 5 Across $\times$ 8.
- 10** Its digits add to 14.
More than 43 and less than 73.
- 11** Its digits add to 14.
It ends in 7.
- 12** 5 Across + 62.

Down

- 1** A multiple of 7.
Its digits go down from left to right.
- 2** Its digits add to 12.
It ends in 3.
- 3** A multiple of 6.
Its digits multiply to 72.
- 5** Its digits multiply to 90.
Its digits go down from left to right.
- 7** Its digits add to 24.
Its digits go up from left to right.
- 9** A multiple of 5.
Its digits add to 12.

**9****Cross-Number**

Write one digit in each white square. Every answer is a number that fits its clue.



1	2		3		4
	5				
6			7	8	
9		10		11	
		12			
				13	

Across

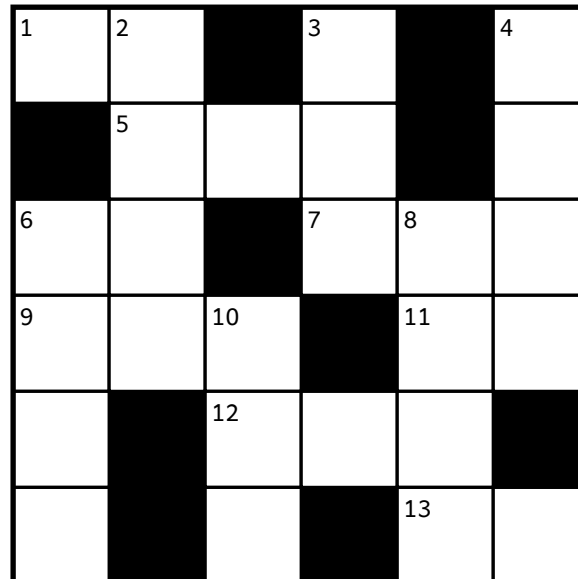
- 1** It reads the same both ways.
- 5** A multiple of 4.
Its digits multiply to 96.
- 6** A multiple of 9.
A factor of 72.
- 7** Its digits add to 8.
Its digits multiply to 18.
- 9** A multiple of 7.
Its digits add to 10.
- 11** A multiple of 3.
A multiple of 5.
- 12** Its digits add to 4.
It starts with 2.
- 13** A multiple of 9.
More than 19 and less than 31.

Down

- 2** 7 Across $\times$ 7.
- 3** A prime number.
Its digits add to 13.
- 4** A multiple of 5.
It reads the same both ways.
- 6** A multiple of 6.
Its digits add to 6.
- 8** 5 Across $\times$ 9.
- 10** A prime number.
Its digits multiply to 98.

**10****Cross-Number**

Write one digit in each white square. Every answer is a number that fits its clue.

**Across**

- 1** Its digits add to 17.
Its digits multiply to 72.
- 5** All its digits are the same.
An even number.
- 6** All its digits are the same.
An even number.
- 7** 13 Across $\times$ 9.
- 9** 7 Across + 22.
- 11** 13 Across + 27.
- 12** Its digits add to 13.
It ends in 6.
- 13** A prime number.
Its digits add to 7.

Down

- 2** A multiple of 12.
Its digits go down from left to right.
- 3** Its digits add to 9.
A factor of 486.
- 4** A staircase number (1, 3, 6, 10, 15 ...).
It starts with 6.
- 6** Its digits add to 22.
Its digits go up from left to right.
- 8** A multiple of 7.
Its digits go down from left to right.
- 10** Its digits multiply to 45.
Its digits go down from left to right.



Answers

For grown-ups. Cut off or keep this page aside until the puzzles are done.

Learn • Cross-Number

1	9	6	9
6			0
7	6		0

Across

- 1 A multiple of 3.
Its digits add to 24.
3 Its digits add to 13.
It ends in 0.

Down

- 1 A prime number.
More than 948 and less than 970.
2 A square number.
Its digits add to 9.

#1

1	7		2	4	6	7
4	8	4	8			9
	6	8	7	6		
8	6	7		9	7	7
	8		10	6	8	

10 Across is 68: its own clues allow nothing else.

#2

1	9	8		3	4	9
	4	5	7	4		
5	3	2		6	4	8
	3					4
6			8	1	4	8

1 Across is 98: its own clues allow nothing else. The digit 7 Down shares with 8 Across leaves only 848.

#3

1	8	3		2	4	8
	1					5
4	1	9		6	7	2
		7	7	5	5	
8	7	4		9	2	

1 Across is 83: its own clues allow nothing else. The digit 1 Down shares with 4 Across leaves only 811.

#4

1	3	3		2	9	1
	2					2
4	5	7		6	3	3
		7	6	1	5	
8	3	5		9	1	2

1 Across is 33: its own clues allow nothing else. The digit 5 Down shares with 7 Across leaves only 765.

#5

	1	6	5	2	1		3		9
4	3	2			2	7	8		
		6	3	7	2	4			3
8	4		9	9	5	10	2		
11	9	8	9		12	5	3		
	4		13	2	5	9			

10 Down is 259: its own clues allow nothing else. The digit 1 Down shares with 4 Across leaves only 623.

#6

1	9		2	6	8	8	6
	1		5	4	1	4	
6	9	7	2			4	
		2		8	9	8	9
		10	11	3	4		5
12	9	7	5	0			7

9 Down is 257: its own clues allow nothing else. The digit 2 Down shares with 2 Across leaves only 642.

#7

1	8		2	6	3	2	8
	2		5	9	9		
6	3	7	3		2		
		0		8	6	9	1
		10	11	5	1	0	2
12	9	6	4	2			7

1 Down is 823: its own clues allow nothing else. The digit 2 Down shares with 2 Across leaves only 653.

#8

	1	7		2	9	4	3
	4	6	5	0			1
5	6	3		6	3	2	3
8	5	0	9	4		10	6
	3		11	3	4	7	
12	1	2	5			9	

4 Across is 650: its own clues allow nothing else. The digit 2 Down shares with 2 Across leaves only 903. 8 Across is 5 Across $\times$ 8 = 504.



Answers For grown-ups. Cut off or keep this page aside until the puzzles are done.

#9

1	2	2	3	2	4	5
	5	2	6	8		3
6	3	6		7	3	2
9	2	1	10		11	4
	1		12	1	1	
0		7		13	2	7

13 Across is 27: its own clues allow nothing else. The digit 10 Down shares with 12 Across leaves only 727. 2 Down is 7 Across $\times$ 7 = 2261.

#10

1	8	9	3	2	4	6
	5	4	4	4		6
6	2	2		7	3	8
9	4	0	10		11	7
	7		12	5	2	6
9		1		13	4	3

10 Down is 951: its own clues allow nothing else. The digit 12 Across shares with 10 Down leaves only 526. 7 Across is 13 Across $\times$ 9 = 387.