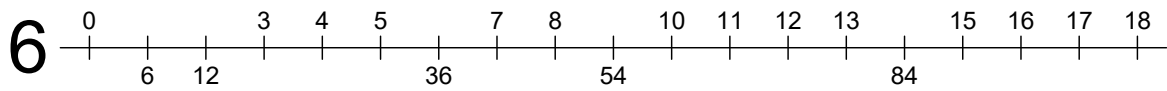




# Multiplication Tables



Fill in the missing numbers.



Fill in the missing sections of the circles below.

The figure shows 15 circular multiplication puzzles arranged in a grid-like pattern. Each circle has a central '6' and is divided into 12 segments by three lines (vertical, horizontal, and diagonal). The segments contain numbers representing products of 6 and other numbers. Some segments are blank, indicating missing numbers to be filled in.

- Circle 1 (top-left): 18, 6, 3, 7, 1, 6, 9, 8, 5, 2
- Circle 2 (top-middle): 2, 3, 9, 6, 6, 4, 5, 3, 4
- Circle 3 (top-right): 1, 2, 6, 3, 6, 6, 9, 4, 12
- Circle 4 (middle-left): 11, 7, 5, 9, 6, 8, 9, 3, 14
- Circle 5 (middle-middle): 4, 5, 7, 2, 6, 15, 9, 14, 11
- Circle 6 (middle-right): 10, 2, 5, 1, 6, 17, 4, 12, 9
- Circle 7 (bottom-left): 5, 2, 16, 3, 6, 13, 13, 17, 7
- Circle 8 (bottom-middle): 5, 13, 17, 0, 6, 18, 12, 15, 10
- Circle 9 (bottom-right): 10, 2, 5, 1, 6, 17, 4, 12, 9
- Circle 10 (bottom-left): 7, 11, 13, 6, 6, 5, 4, 17, 3
- Circle 11 (bottom-middle): 4, 2, 24, 3, 6, 42, 8, 5, 36
- Circle 12 (bottom-right): 6, 13, 66, 9, 6, 18, 14, 15, 108
- Circle 13 (bottom-left): 3, 4, 54, 8, 6, 24, 5, 7, 48
- Circle 14 (bottom-middle): 7, 5, 78, 14, 6, 12, 9, 11, 18
- Circle 15 (bottom-right): 6, 13, 66, 9, 6, 18, 14, 15, 108



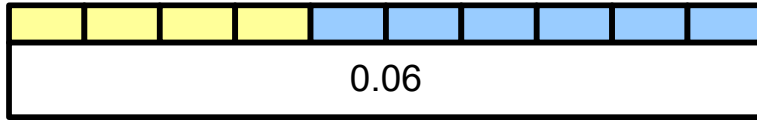
Fill in the missing numbers in the multiplication grid

×	8	6	11		13	7	12	9		5	2
3											
7				21							
		12			26				20		
10											
6											
				12			48		40		
11											
14											
8											
				15		35			50		
9											



The overall scale is the value at the bottom of the scale. What are the yellow parts worth?

eg



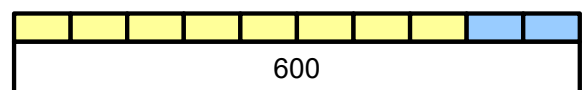
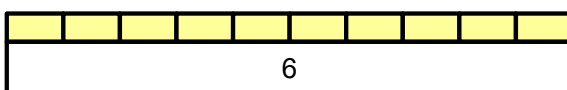
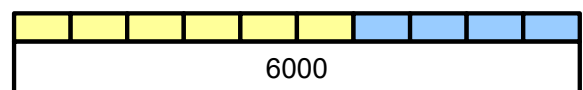
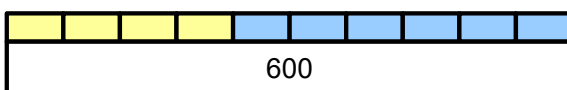
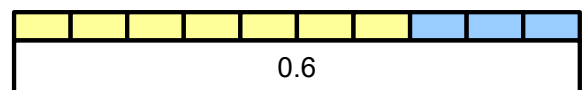
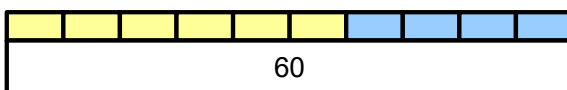
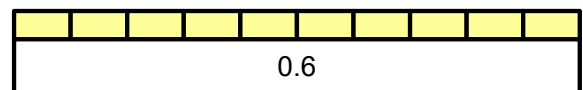
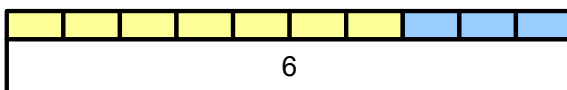
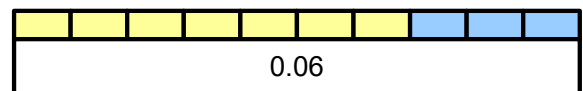
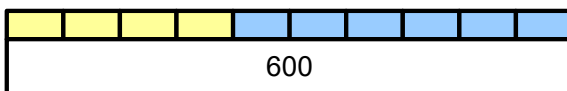
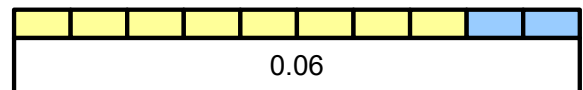
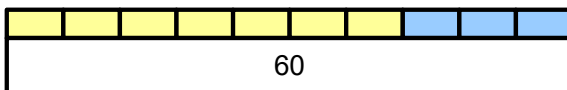
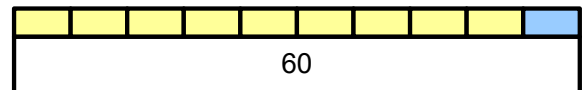
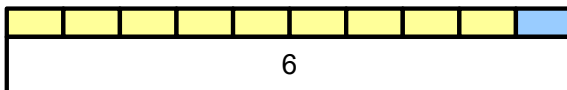
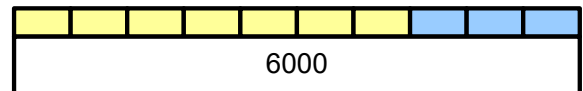
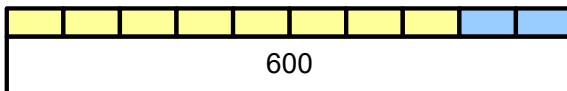
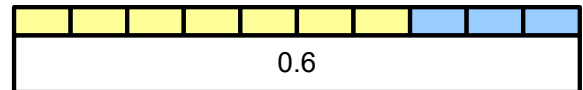
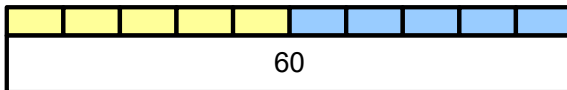
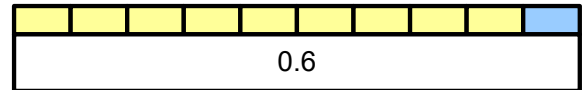
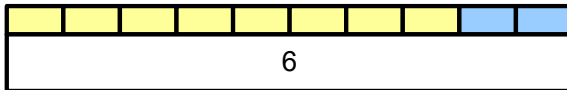
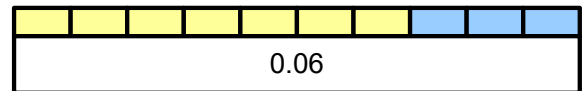
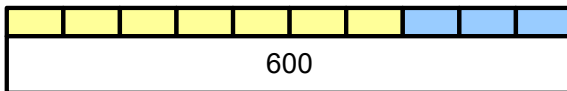
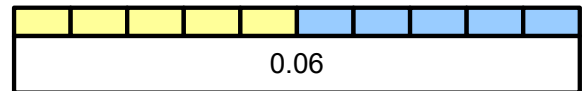
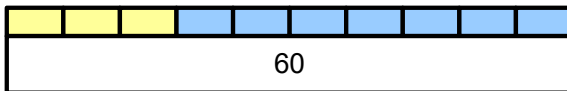
Here, there are four yellow parts.

The overall bar is worth 0.06.

Each block of yellow and blue is worth a tenth of 0.06 which is 0.006.

Four lots of 0.006 is 0.024 of yellow.

Six lots of 0.006 is 0.036 of blue.

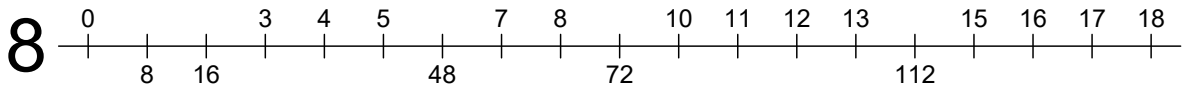




1	$6 \times 3 =$	36	$6 \times 60 =$
2	$6 \times 7 =$	37	$6 \times 19 =$
3	$6 \times 4 =$	38	$6 \times 17 =$
4	$6 \times 8 =$	39	$6 \times 4 =$
5	$6 \times 2 =$	40	$6 \times 6 =$
6	$6 \times 7 =$	41	$6 \times 20 =$
7	$6 \times 6 =$	42	$6 \times 0 =$
8	$6 \times 1 =$	43	$6 \times 5 =$
9	$6 \times 6 =$	44	$6 \times 7 =$
10	$6 \times 4 =$	45	$6 \times 6 =$
11	$6 \times 5 =$	46	$6 \times 3 =$
12	$6 \times 11 =$	47	$6 \times 4 =$
13	$6 \times 20 =$	48	$6 \times 20 =$
14	$6 \times 14 =$	49	$6 \times 50 =$
15	$6 \times 18 =$	50	$6 \times 80 =$
16	$6 \times 30 =$	51	$6 \times 30 =$
17	$6 \times 4 =$	52	$6 \times 5 =$
18	$6 \times 15 =$	53	$6 \times 70 =$
19	$6 \times 18 =$	54	$6 \times 90 =$
20	$6 \times 17 =$	55	$6 \times 12 =$
21	$6 \times 8 =$	56	$6 \times 19 =$
22	$6 \times 3 =$	57	$6 \times 17 =$
23	$6 \times 2 =$	58	$6 \times 16 =$
24	$6 \times 0 =$	59	$6 \times 30 =$
25	$6 \times 9 =$	60	$6 \times 20 =$
26	$6 \times 6 =$	61	$6 \times 18 =$
27	$6 \times 8 =$	62	$6 \times 40 =$
28	$6 \times 9 =$	63	$6 \times 70 =$
29	$6 \times 5 =$	64	$6 \times 90 =$
30	$6 \times 3 =$	65	$6 \times 19 =$
31	$6 \times 7 =$	66	$6 \times 16 =$
32	$6 \times 6 =$	67	$6 \times 11 =$
33	$6 \times 40 =$	68	$6 \times 14 =$
34	$6 \times 50 =$	69	$6 \times 19 =$
35	$6 \times 30 =$	70	$6 \times 18 =$



Fill in the missing numbers



Fill in the missing sections in the circles below

15 circular multiplication puzzles, each with a central '8' and 8 segments. The numbers in the segments are as follows:

- Circle 1: 24, 6, 3, 1, 7, 8, 5, 2
- Circle 2: 2, 3, 6, 9, 4, 5, 3, 4
- Circle 3: 96, 1, 2, 6, 6, 4, 12, 88
- Circle 4: 112, 11, 9, 5, 9, 3, 14, 64
- Circle 5: 4, 5, 2, 7, 15, 9, 14, 11
- Circle 6: 5, 2, 3, 16, 13, 17, 7, 32
- Circle 7: 5, 13, 0, 17, 18, 12, 15, 10
- Circle 8: 10, 2, 1, 5, 17, 4, 12, 9
- Circle 9: 7, 11, 6, 13, 5, 4, 17, 3
- Circle 10: 4, 2, 3, 64, 40, 8, 5, 32
- Circle 11: 3, 4, 8, 56, 24, 7, 5, 48
- Circle 12: 7, 5, 14, 40, 96, 11, 9, 24
- Circle 13: 6, 13, 9, 48, 80, 15, 14, 104



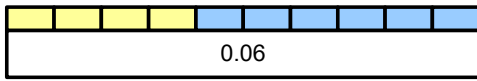
Fill the gaps in the multiplication grid

×	9		14	12		8	2	13		4	2
2											
5											
	63				21					28	
11									121		
4		20									
8					24						
9											
		15			9						
15					45				165		
10											
12									132		



The overall scale is the value at the bottom of the scale. What are the yellow parts worth?

eg Here, there are four yellow parts.



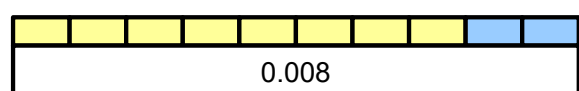
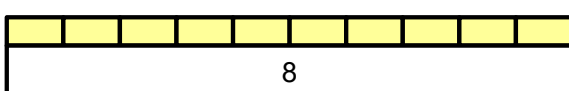
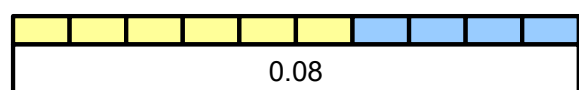
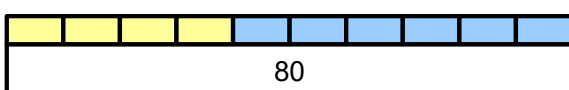
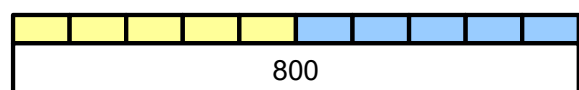
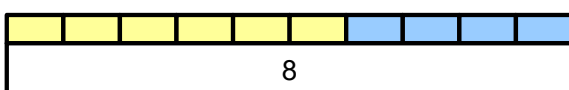
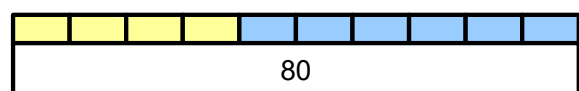
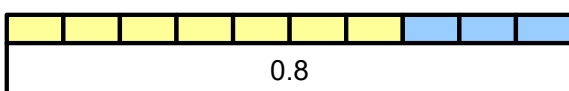
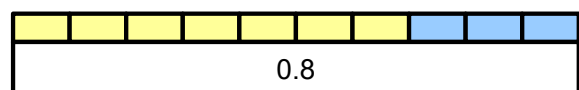
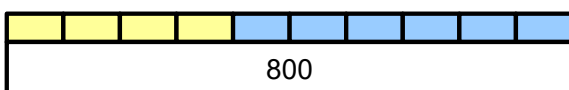
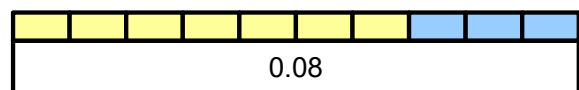
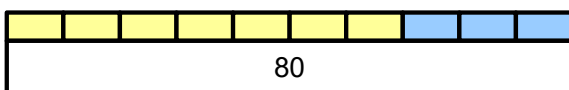
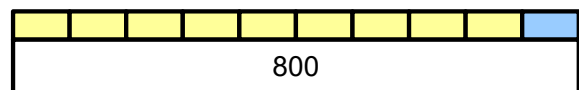
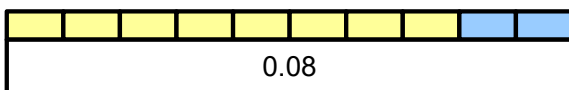
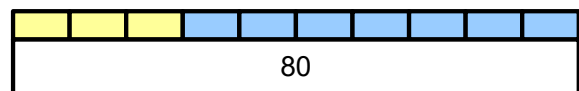
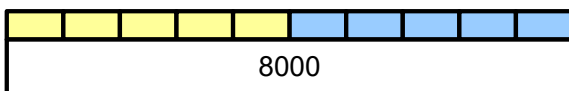
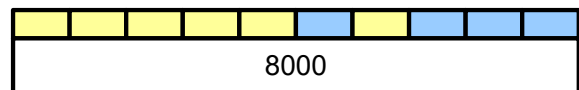
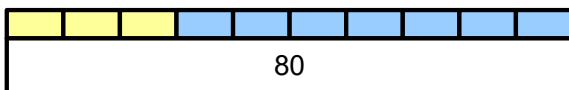
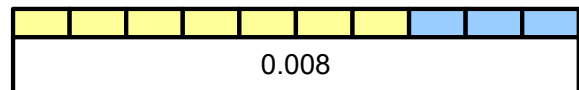
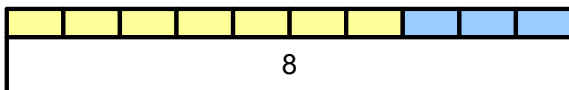
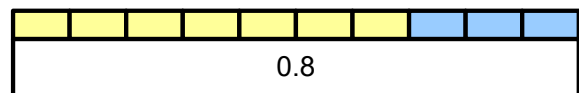
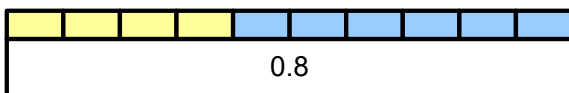
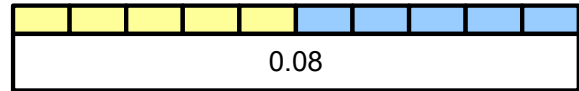
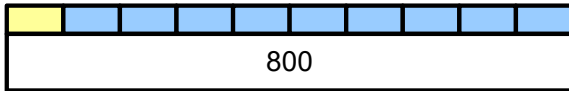
The overall bar is worth 0.06.

Each block of yellow and blue is worth a tenth of 0.06

which is 0.006.

Four lots of 0.006 is 0.024 of yellow.

Six lots of 0.006 is 0.036 of blue.







1	$8 \times 6 =$	35	$8 \times 30 =$
2	$8 \times 7 =$	36	$8 \times 80 =$
3	$6 \times 4 =$	37	$8 \times 19 =$
4	$8 \times 9 =$	38	$8 \times 17 =$
5	$8 \times 2 =$	39	$8 \times 4 =$
6	$8 \times 6 =$	40	$8 \times 8 =$
7	$8 \times 6 =$	41	$8 \times 20 =$
8	$8 \times 1 =$	42	$8 \times 0 =$
9	$8 \times 6 =$	43	$8 \times 7 =$
10	$8 \times 4 =$	44	$8 \times 7 =$
11	$8 \times 6 =$	45	$8 \times 3 =$
12	$8 \times 11 =$	46	$8 \times 7 =$
13	$8 \times 20 =$	47	$8 \times 4 =$
14	$8 \times 14 =$	48	$8 \times 20 =$
15	$8 \times 18 =$	49	$8 \times 50 =$
16	$8 \times 30 =$	50	$8 \times 80 =$
17	$8 \times 6 =$	51	$8 \times 30 =$
18	$8 \times 15 =$	52	$8 \times 5 =$
19	$8 \times 18 =$	53	$8 \times 70 =$
20	$8 \times 17 =$	54	$8 \times 90 =$
21	$8 \times 8 =$	55	$8 \times 12 =$
22	$8 \times 6 =$	56	$8 \times 19 =$
23	$8 \times 2 =$	57	$8 \times 7 =$
24	$8 \times 0 =$	58	$8 \times 18 =$
25	$8 \times 9 =$	59	$8 \times 30 =$
26	$8 \times 8 =$	60	$8 \times 20 =$
27	$8 \times 8 =$	61	$8 \times 18 =$
28	$8 \times 9 =$	62	$8 \times 40 =$
29	$8 \times 5 =$	63	$8 \times 70 =$
30	$8 \times 0 =$	64	$8 \times 90 =$
31	$8 \times 7 =$	65	$8 \times 17 =$
32	$8 \times 8 =$	66	$8 \times 18 =$
33	$8 \times 40 =$	67	$8 \times 11 =$
34	$8 \times 50 =$	68	$8 \times 14 =$



1  $\frac{3}{8} \times \frac{5}{8} =$

23  $\frac{7}{8} \times \frac{3}{7} =$

2  $\frac{1}{8} \times \frac{3}{7} =$

24  $\frac{4}{8} \times \frac{3}{5} =$

3  $\frac{5}{8} \times \frac{11}{12} =$

25  $\frac{6}{8} \times \frac{1}{4} =$

4  $\frac{6}{8} \times \frac{9}{15} =$

26  $\frac{5}{8} \times \frac{3}{8} =$

5  $\frac{7}{8} \times \frac{7}{14} =$

27  $\frac{2}{8} \times \frac{4}{8} =$

6  $\frac{2}{8} \times \frac{8}{16} =$

28  $\frac{1}{8} \times \frac{3}{9} =$

7  $\frac{4}{8} \times \frac{4}{9} =$

29  $\frac{5}{8} \times \frac{2}{6} =$

8  $\frac{3}{8} \times \frac{6}{10} =$

30  $\frac{4}{8} \times \frac{2}{5} =$

9  $\frac{1}{8} \times \frac{3}{5} =$

31  $\frac{6}{8} \times \frac{4}{6} =$

10  $\frac{7}{8} \times \frac{3}{4} =$

32  $\frac{7}{8} \times \frac{3}{4} =$

11  $\frac{5}{8} \times \frac{2}{3} =$

33  $\frac{4}{8} \times \frac{7}{8} =$

12  $\frac{5}{8} \times \frac{3}{6} =$

34  $\frac{3}{8} \times \frac{11}{12} =$

13  $\frac{2}{8} \times \frac{4}{12} =$

35  $\frac{7}{8} \times \frac{13}{14} =$

14  $\frac{5}{8} \times \frac{6}{7} =$

36  $\frac{4}{8} \times \frac{6}{7} =$

15  $\frac{1}{8} \times \frac{8}{12} =$

37  $\frac{3}{8} \times \frac{3}{5} =$

16  $\frac{6}{8} \times \frac{13}{14} =$

38  $\frac{2}{8} \times \frac{5}{8} =$

17  $\frac{7}{8} \times \frac{13}{15} =$

39  $\frac{6}{8} \times \frac{4}{9} =$

18  $\frac{5}{8} \times \frac{12}{13} =$

40  $\frac{1}{8} \times \frac{3}{4} =$

19  $\frac{5}{8} \times \frac{13}{16} =$

41  $\frac{2}{8} \times \frac{2}{5} =$

20  $\frac{3}{8} \times \frac{3}{5} =$

42  $\frac{5}{8} \times \frac{5}{7} =$

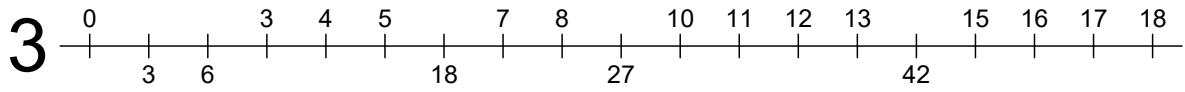
21  $\frac{2}{8} \times \frac{1}{4} =$

43  $\frac{6}{8} \times \frac{7}{8} =$

22  $\frac{1}{8} \times \frac{2}{3} =$



Fill in the missing numbers



Fill in the missing numbers in the circles below

The following table lists the numbers present in each of the 15 circles:

Circle	Top-Right	Top	Top-Left	Center	Bottom-Left	Bottom	Bottom-Right
1	24	6	8	3	1	9	7
2		2	3	3	6	4	9
3	36	1	2	3	6	4	12
4	51	11	5	3	9	3	14
5		4	5	3	2	15	7
6	45	5	17	3	0	18	12
7		10	2	3	1	17	5
8		7	11	3	12	5	13
9		4	2	3	3	40	8
10		3	2	3	5	5	8
11		64	6	3	12	13	57
12		40	5	3	8	9	5
13		32	7	3	14	11	9
14			5	3	42	11	9
15			6	3	12	13	14
16			9	3	60	15	14
17				3			
18				3			



Fill in the gaps in the multiplication grid

×	7	14	6	12	15		9	13	25		2
2											
5										20	
3						24					
		154		132					275		
4											
8											
	63				135					36	
7											
15										60	
10											
12						96					



1  $\frac{1}{3} \times \frac{2}{3} =$

2  $\frac{5}{6} \times \frac{2}{9} =$

3  $\frac{5}{9} \times \frac{6}{12} =$

4  $\frac{4}{7} \times \frac{5}{12} =$

5  $\frac{5}{9} \times \frac{5}{11} =$

6  $\frac{4}{9} \times \frac{7}{12} =$

7  $\frac{9}{15} \times \frac{7}{15} =$

8  $\frac{7}{12} \times \frac{6}{15} =$

9  $\frac{8}{15} \times \frac{3}{16} =$

10  $\frac{8}{25} \times \frac{7}{15} =$

11  $\frac{9}{14} \times \frac{7}{18} =$

12  $\frac{15}{24} \times \frac{5}{6} =$

13  $\frac{7}{15} \times \frac{8}{21} =$

14  $\frac{5}{9} \times \frac{8}{15} =$

15  $\frac{8}{12} \times \frac{9}{16} =$

16  $\frac{7}{11} \times \frac{33}{70} =$

17  $\frac{5}{9} \times \frac{18}{60} =$

18  $\frac{10}{11} \times \frac{22}{35} =$

19  $\frac{33}{48} \times \frac{16}{44} =$

20  $\frac{3}{9} \times \frac{3}{5} =$

21  $\frac{2}{8} \times \frac{1}{7} =$

22  $\frac{7}{12} \times \frac{2}{9} =$

23  $\frac{7}{8} \div \frac{12}{14} =$

24  $\frac{3}{4} \div \frac{3}{5} =$

25  $\frac{6}{9} \div \frac{3}{4} =$

26  $\frac{12}{27} \div \frac{3}{8} =$

27  $\frac{15}{63} \div \frac{14}{16} =$

28  $\frac{8}{15} \div \frac{5}{12} =$

29  $\frac{7}{16} \div \frac{12}{21} =$

30  $\frac{4}{9} \div \frac{2}{15} =$

31  $\frac{6}{7} \div \frac{4}{6} =$

32  $\frac{5}{8} \div \frac{12}{25} =$

33  $\frac{4}{8} \div \frac{7}{8} =$

34  $\frac{3}{8} \div \frac{11}{12} =$

35  $\frac{7}{8} \div \frac{13}{14} =$

36  $\frac{4}{8} \div \frac{6}{7} =$

37  $\frac{3}{8} \div \frac{3}{5} =$

38  $\frac{2}{8} \div \frac{5}{8} =$

39  $\frac{6}{8} \div \frac{4}{9} =$

40  $\frac{1}{8} \div \frac{3}{4} =$

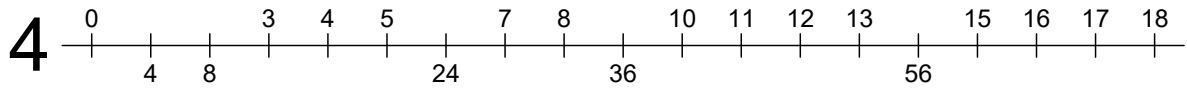
41  $\frac{2}{8} \div \frac{2}{5} =$

42  $\frac{5}{8} \div \frac{5}{7} =$

43  $\frac{6}{8} \div \frac{7}{8} =$



Fill in the missing numbers



Fill in the missing numbers in the circles below

The puzzles are arranged in a grid-like pattern. Each puzzle has a central circle with the number 4. The inner ring contains 8 numbers, and the outer ring contains 8 numbers. The numbers in the inner ring are multiplied by 4 to produce the numbers in the outer ring. Some numbers are missing and need to be filled in.



Fill in the times table grid below.

×	5	17	6	9	12		14	13	25		2
4											
9										27	
2						24					
		51		27					75		
6											
7											
	65				156						
8											
12										36	
11											
25						300					



Follow the arrows to write the answer in the final square

Start : 12 →	+3 ↓		×5 →	+50 →	÷5 ↓
	×2 →	÷3 →	-15 ↑		+8 ↓
Answer is:					×7 ↓
×8 ↑	÷10 ←	×5 ←	+3 ←	÷5 ←	-6 ←

- 1  $3(4 + 7) - 2(5 + 3) =$
- 2  $4(9 + 4) - 3(6 + 3) =$
- 3  $8(6 + 7) - 5(8 + 2) =$
- 4  $6(11 + 3) - 4(5 + 3) =$
- 5  $7(9 + 6) - 6(7 + 4) =$
- 6  $8(8 + 12) - 4(8 + 5) =$
- 7  $4(7 + 15) - 2(3 + 3) =$
- 8  $6(3 + 11) - 4(11 + 1) =$
- 9  $4(4 + 15) - 3(5 + 2) =$
- 10  $6(8 + 16) - 5(12 + 4) =$
- 11  $3(5 + 15) - 2(14 + 5) =$
- 12  $3(8 + 14) - 2(13 + 3) =$





1  $2^{-2} =$

2  $2^{-1} =$

3  $2^0 =$

4  $2^1 =$

5  $2^2 =$

6  $2^3 =$

7  $2^4 =$

8  $2^5 =$

9  $2^6 =$

10  $2^7 =$

11  $2^8 =$

12  $2^9 =$

13  $2^{10} =$

14  $2^{11} =$

15  $2^{12} =$

16  $2^{13} =$

17  $2^{14} =$

18  $2^{15} =$

19  $2^{16} =$

20  $2^{17} =$

21  $2^{18} =$

22  $2^{19} =$

23  $2^{20} =$

24  $2^{21} =$

25  $2^{22} =$

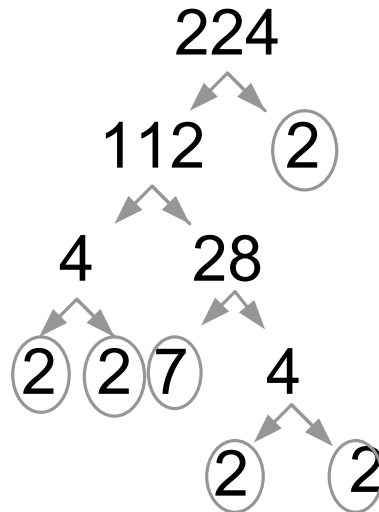
26  $2^{23} =$

27  $2^{24} =$



Draw a factor tree. Remember to circle the prime numbers.

eg



Now you try for 84

252

600