

# Multiplication and Division

**Learning From Home**



**Answers**

## Common Factors

- |                      |               |
|----------------------|---------------|
| 1. 1                 | 1. 1, 5       |
| 2. 1, 2, 4, 8        | 2. 1, 2, 3, 6 |
| 3. 1, 2, 3, 6        | 3. 1, 2, 4    |
| 4. 1, 3, 7, 21       | 4. 1, 3, 9    |
| 5. 1, 2, 5, 10       |               |
| 6. 1, 2, 4           |               |
| 7. 1, 3, 9           |               |
| 8. 1, 2, 3, 4, 6, 12 |               |

## Finding Prime Factors

A	48	$2 \times 2 \times 2 \times 3 \times 2$
B	24	$2 \times 2 \times 2 \times 3$
C	44	$2 \times 2 \times 11$
D	42	$2 \times 3 \times 7$
E	60	$2 \times 2 \times 3 \times 5$
F	88	$2 \times 2 \times 2 \times 11$
G	96	$2 \times 2 \times 2 \times 2 \times 2 \times 3$
H	72	$2 \times 2 \times 2 \times 3 \times 3$
I	105	$3 \times 5 \times 7$
J	462	$2 \times 3 \times 7 \times 11$

## Identifying Prime Numbers 1 to 100

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

# Recalling Prime Numbers 0-19

A. Write out the prime numbers between 0-19 with your weaker hand!  
2, 3, 5, 7, 11, 13, 17, 19

B. Write the prime numbers out in descending order (highest to lowest).  
19, 17, 13, 11, 7, 5, 3, 2

C. Which three prime numbers are missing?  
13, 7, 19, 2, 5, 3, 17, 11

D. Circle the prime numbers.  
six **one** **19** nine  
fifteen **17** <sup>15</sup> ~~15~~ ~~thirteen~~ ~~13~~  
**7** ~~15~~ ~~13~~ ~~11~~

## Long Multiplication Practice – 3 Digits × 2 Digits

1.				
		1	6	1
x			2	3
		4	8	3
	3	2	2	0
	3	7	0	3

2.				
		2	3	2
x			2	6
	1	3	9	2
	4	6	4	0
	6	0	3	2

3.				
		6	1	4
x			1	8
	4	9	1	2
	6	1	4	0
1	1	0	5	2

4.				
		9	6	9
x			9	5
	4	8	4	5
8	7	2	1	0
9	2	0	5	5

5.				
		7	4	0
x			9	6
	4	4	4	0
6	6	6	0	0
7	1	0	4	0

6.				
		3	6	2
x			5	8
	2	8	9	6
1	8	1	0	0
2	0	9	9	6

7.				
		3	0	5
x			7	1
	3	0	5	
2	1	3	5	0
2	1	6	5	5

8.				
		3	7	0
x			6	4
	1	4	8	0
2	2	2	0	0
2	3	6	8	0

9.				
		5	8	4
x			1	5
	2	9	2	0
	5	8	4	0
	8	7	6	0

10.				
		8	5	1
x			8	9
	7	6	5	9
6	8	0	8	0
7	5	7	3	9

11.				
		7	4	9
x			9	8
	5	9	9	2
6	7	4	1	0
7	3	4	0	2

12.				
		4	8	2
x			2	3
	1	4	4	6
	9	6	4	0
1	1	0	8	6

13.				
		6	4	6
x			1	0
				0
	6	4	6	0
	6	4	6	0

14.				
		7	0	9
x			1	7
	4	9	6	3
	7	0	9	0
1	2	0	5	3

15.				
		9	1	4
x			5	7
	6	3	9	8
4	5	7	0	0
5	2	0	9	8

16.				
		7	1	8
x			4	5
	3	5	9	0
2	8	7	2	0
3	2	3	1	0

# Long Multiplication Practice – 4 Digits × 2 Digits

1.					
		2	1	9	0
x				6	9
	1	9	7	1	0
1	3	1	4	0	0
1	5	1	1	1	0

2.					
		1	3	4	2
x				5	2
		2	6	8	4
	6	7	1	0	0
	6	9	7	8	4

3.					
		1	5	2	1
x				7	3
		4	5	6	3
1	0	6	4	7	0
1	1	1	0	3	3

4.					
		1	1	4	3
x				3	4
		4	5	7	2
	3	4	2	9	0
	3	8	8	6	2

5.					
		2	4	6	8
x				2	7
	1	7	2	7	6
	4	9	3	6	0
	6	6	6	3	6

6.					
		1	8	9	5
x				4	6
	1	1	3	7	0
	7	5	8	0	0
	8	7	1	7	0

7.					
		1	4	6	2
x				7	0
					0
1	0	2	3	4	0
1	0	2	3	4	0

8.					
		1	2	3	9
x				1	9
	1	1	1	5	1
	1	2	3	9	0
	2	3	5	4	1

9.					
		1	3	5	9
x				7	7
		9	5	1	3
	9	5	1	3	0
1	0	4	6	4	3

10.					
		2	1	2	7
x				4	8
	1	7	0	1	6
	8	5	0	8	0
1	0	2	0	9	6

11.					
		1	9	2	0
x				1	2
		3	8	4	0
	1	9	2	0	0
	2	3	0	4	0

12.					
		2	2	9	1
x				4	0
					0
	9	1	6	4	0
	9	1	6	4	0

## Multiplication Grids

1. 6139 × 7 = 42 973

2. 6975 × 3 = 20 925

3. 8283 × 5 = 41 415

4. 5620 × 5 = 28 100

5. 2407 × 9 = 21 663

6. 3922 × 5 = 19 610

7. 3349 × 7 = 23 443

8. 8482 × 5 = 42 410

9. 1945 × 7 = 13 615

10. 5856 × 5 = 29 280

## Without Grids

1. 6586 × 5 = 32 930

2. 6682 × 9 = 60 138

3. 9870 × 4 = 39 480

4. 1476 × 4 = 5904

5. 4217 × 7 = 29 519

6. 1815 × 6 = 10 890

7. 8292 × 8 = 66 336

8. 8940 × 8 = 71 520

9. 5512 × 5 = 27 560

10. 9706 × 8 = 77 648

## Halving to Divide by 4, 8 and 16

	halve ( $\div 2$ )	$\div 4$	$\div 8$	$\div 16$
848	424	212	106	53
864	432	216	108	54
224	112	56	28	14
1488	744	372	186	93
784	392	196	98	49
192	96	48	24	12
1072	536	268	134	67
480	240	120	60	30
528	264	132	66	33
320	160	80	40	20
3392	1696	848	424	212
15 344	7672	3836	1918	959
13 264	6632	3316	1658	829
15 264	7632	3816	1908	954
10 768	5384	2692	1346	673
3376	1688	844	422	211
7936	3968	1984	992	496
12 288	6144	3072	1536	768
10 448	5224	2612	1306	653
3952	1976	988	494	247
107 216	53 608	26 804	13 402	6701
39 296	19 648	9824	4912	2456
126 480	63 240	31 620	15 810	7905

# Doubling to Multiply by 4, 8 and 16

	Double ( $\times 2$ )	$\times 4$	$\times 8$	$\times 16$
21	42	84	168	336
76	152	304	608	1216
63	126	252	504	1008
58	116	232	464	928
92	184	368	736	1472
85	170	340	680	1360
91	182	364	728	1456
95	190	380	760	1520
40	80	160	320	640
47	94	188	376	752
157	314	628	1256	2512
311	622	1244	2488	4976
959	1918	3836	7672	15 344
341	682	1364	2728	5456
174	348	696	1392	2784
724	1448	2896	5792	11 584
532	1064	2128	4256	8512
975	1950	3900	7800	15 600
731	1462	2924	5848	11 696
826	1652	3304	6608	13 216
1818	3636	7272	14 544	29 088
4759	9518	19 036	38 072	76 144
1369	2738	5476	10 952	21 904

# Dividing Multiples of 10 by 1-Digit Numbers

- $250 \div 5 = 50$
- $100 \div 5 = 20$
- $80 \div 1 = 80$
- $720 \div 8 = 90$
- $180 \div 9 = 20$
- $70 \div 1 = 70$
- $420 \div 6 = 70$
- $60 \div 6 = 10$
- $200 \div 4 = 50$
- $270 \div 3 = 90$
- $450 \div 5 = 90$
- $60 \div 3 = 20$
- $240 \div 8 = 30$
- $300 \div 6 = 50$
- $150 \div 5 = 30$
- $50 \div 1 = 50$
- $200 \div 4 = 50$
- $120 \div 2 = 60$
- $60 \div 3 = 20$
- $180 \div 3 = 60$
- $200 \div 5 = 40$
- $90 \div 3 = 30$
- $250 \div 5 = 50$
- $630 \div 7 = 90$
- $120 \div 6 = 20$
- $560 \div 8 = 70$
- $40 \div 4 = 10$
- $160 \div 8 = 20$
- $810 \div 9 = 90$
- $40 \div 4 = 10$

# Dividing Multiples of 10

1.  $4000 \div 50 = 80$
2.  $3600 \div 60 = 60$
3.  $1800 \div 90 = 20$
4.  $400 \div 20 = 20$
5.  $1000 \div 20 = 50$
6.  $1600 \div 20 = 80$
7.  $1400 \div 70 = 20$
8.  $1800 \div 60 = 30$
9.  $1800 \div 90 = 20$
10.  $2500 \div 50 = 50$
11.  $4500 \div 90 = 50$
12.  $1800 \div 60 = 30$
13.  $300 \div 10 = 30$
14.  $2800 \div 70 = 40$
15.  $1000 \div 50 = 20$
16.  $1200 \div 30 = 40$
17.  $1200 \div 60 = 20$
18.  $4500 \div 90 = 50$
19.  $1600 \div 20 = 80$
20.  $400 \div 10 = 40$
21.  $1200 \div 60 = 20$
22.  $2400 \div 80 = 30$
23.  $2400 \div 60 = 40$
24.  $1000 \div 20 = 50$
25.  $3200 \div 80 = 40$
26.  $2400 \div 80 = 30$
27.  $600 \div 20 = 30$
28.  $900 \div 30 = 30$
29.  $600 \div 30 = 20$
30.  $8100 \div 90 = 90$



# Multiplying Multiples of 10 by 1-Digit Numbers

1.  $80 \times 7 = 560$
2.  $10 \times 8 = 80$
3.  $70 \times 1 = 70$
4.  $50 \times 3 = 150$
5.  $70 \times 5 = 350$
6.  $50 \times 5 = 250$
7.  $70 \times 7 = 490$
8.  $60 \times 2 = 120$
9.  $20 \times 8 = 160$
10.  $90 \times 2 = 180$
11.  $30 \times 2 = 60$
12.  $60 \times 5 = 300$
13.  $50 \times 2 = 100$
14.  $70 \times 9 = 630$
15.  $50 \times 6 = 300$
16.  $30 \times 2 = 60$
17.  $90 \times 3 = 270$
18.  $80 \times 1 = 80$
19.  $70 \times 8 = 560$
20.  $60 \times 2 = 120$
21.  $80 \times 3 = 240$
22.  $40 \times 7 = 280$
23.  $10 \times 2 = 20$
24.  $60 \times 3 = 180$
25.  $10 \times 2 = 20$
26.  $30 \times 9 = 270$
27.  $10 \times 4 = 40$
28.  $40 \times 2 = 80$
29.  $80 \times 7 = 560$
30.  $30 \times 3 = 90$

# Multiplying Multiples of 10 by 1-Digit Numbers

1.  $40 \times 8 = 320$
2.  $20 \times 5 = 100$
3.  $70 \times 2 = 140$
4.  $60 \times 4 = 240$
5.  $80 \times 4 = 320$
6.  $20 \times 7 = 140$
7.  $80 \times 7 = 560$
8.  $40 \times 9 = 360$
9.  $20 \times 8 = 160$
10.  $60 \times 2 = 120$
11.  $90 \times 2 = 180$
12.  $80 \times 5 = 400$
13.  $70 \times 3 = 210$
14.  $60 \times 9 = 540$
15.  $20 \times 6 = 120$
16.  $50 \times 3 = 150$
17.  $50 \times 5 = 250$
18.  $70 \times 8 = 560$
19.  $30 \times 8 = 240$
20.  $30 \times 7 = 210$
21.  $20 \times 3 = 60$
22.  $80 \times 4 = 320$
23.  $20 \times 2 = 40$
24.  $30 \times 6 = 180$
25.  $30 \times 2 = 60$
26.  $80 \times 9 = 720$
27.  $70 \times 4 = 280$
28.  $90 \times 5 = 450$
29.  $10 \times 7 = 70$
30.  $90 \times 3 = 270$

# Short Division

1.

	2	0	r	1		
2	4	1				

2.

	3	2	r	1	
8	2	5	7		

3.

	4	4	r	3	
9	3	9	9		

4.

	4	2	r	4	
5	2	1	4		

5.

	7	7	r	6	
7	5	4	5		

6.

	9	6	r	3	
9	8	6	7		

7.

	8	6	r	3	
5	4	3	3		

8.

	2	7	r	2	
5	1	3	7		

9.

	6	2	r	5	
7	4	3	9		

10.

	6	1	r	1	
8	4	8	9		

11.

	3	1	r	1	
1	1	3	4	2	

12.

	2	4	r	1	0
1	2	2	9	8	

# Short Division Practice 4 Digits Divided By 1 Digit

1.

	1	4	7	6		
2	2	9	5	2		

2.

	1	7	0	2		
4	6	8	0	8		

3.

	2	4	1	8		
4	9	6	7	2		

4.

	1	6	3	2		
6	9	7	9	2		

5.

	6	3	7			
8	5	0	9	6		

6.

	1	4	8			
9	1	3	3	2		

7.

	1	2	1	1		
8	9	6	8	8		

8.

	6	9	2	r	2	
5	3	4	6	2		

9.

	1	9	1	0	r	3
4	7	6	4	3		

10.

	9	8	8	r	5	
7	6	9	2	1		

11.

	5	0	3	r	5	
9	4	5	3	2		

12.

	2	8	8	4	r	1
3	8	6	5	3		

13.

	4	9	0	r	6	
7	3	4	3	6		

14.

	7	1	5	r	2	
9	6	4	3	7		

# Division Word Problems – Interpreting Answers

1. 97 glasses – round down!
2. 108 pots – round up!
3. 70 rooms – round up!
4. 373 packets – round down!
5. 154 bracelets – round down!
6. 86 teams – round down!

## Multiplying Whole Numbers by 10

1.  $82 \times 10 = 820$
2.  $66 \times 10 = 660$
3.  $14 \times 10 = 140$
4.  $58 \times 10 = 580$
5.  $42 \times 10 = 420$
6.  $56 \times 10 = 560$
7.  $63 \times 10 = 630$
8.  $42 \times 10 = 420$
9.  $54 \times 10 = 540$
10.  $93 \times 10 = 930$
11.  $60 \times 10 = 600$
12.  $53 \times 10 = 530$
13.  $32 \times 10 = 320$
14.  $79 \times 10 = 790$
15.  $37 \times 10 = 370$
16.  $816 \times 10 = 8160$
17.  $711 \times 10 = 7110$
18.  $287 \times 10 = 2870$
19.  $224 \times 10 = 2240$
20.  $567 \times 10 = 5670$
21.  $302 \times 10 = 3020$
22.  $879 \times 10 = 8790$
23.  $440 \times 10 = 4400$
24.  $379 \times 10 = 3790$
25.  $231 \times 10 = 2310$
26.  $488 \times 10 = 4880$
27.  $507 \times 10 = 5070$
28.  $547 \times 10 = 5470$
29.  $319 \times 10 = 3190$
30.  $179 \times 10 = 1790$

## Dividing Numbers by 10

1.  $79 \div 10 = 7.9$
2.  $87 \div 10 = 8.7$
3.  $75 \div 10 = 7.5$
4.  $23 \div 10 = 2.3$
5.  $43 \div 10 = 4.3$
6.  $26 \div 10 = 2.6$
7.  $43 \div 10 = 4.3$
8.  $39 \div 10 = 3.9$
9.  $69 \div 10 = 6.9$
10.  $13 \div 10 = 1.3$
11.  $45 \div 10 = 4.5$
12.  $98 \div 10 = 9.8$
13.  $95 \div 10 = 9.5$
14.  $71 \div 10 = 7.1$
15.  $87 \div 10 = 8.7$
16.  $779 \div 10 = 77.9$
17.  $398 \div 10 = 39.8$
18.  $761 \div 10 = 76.1$
19.  $797 \div 10 = 79.7$
20.  $427 \div 10 = 42.7$
21.  $402 \div 10 = 40.2$
22.  $224 \div 10 = 22.4$
23.  $998 \div 10 = 99.8$
24.  $354 \div 10 = 35.4$
25.  $336 \div 10 = 33.6$
26.  $276 \div 10 = 27.6$
27.  $384 \div 10 = 38.4$
28.  $901 \div 10 = 90.1$
29.  $711 \div 10 = 71.1$
30.  $943 \div 10 = 94.3$

# Multiplying and Dividing by 100 and 1000

<b>* 1000</b>	<b>* 100</b>	
12 000	1200	12
157 000	15 700	157
1 425 000	142 500	1425
4500	450	4.5
250	25	0.25

	<b>÷ 100</b>	<b>÷ 1000</b>
18 000	180	18
458 000	4580	458
7600	76	7.6
950	9.5	0.95
516	5.16	0.516

# Dividing Whole Numbers by 10

1.  $820 \div 10 = 82$
2.  $630 \div 10 = 63$
3.  $170 \div 10 = 17$
4.  $950 \div 10 = 95$
5.  $210 \div 10 = 21$
6.  $930 \div 10 = 93$
7.  $560 \div 10 = 56$
8.  $530 \div 10 = 53$
9.  $440 \div 10 = 44$
10.  $180 \div 10 = 18$
11.  $340 \div 10 = 34$
12.  $940 \div 10 = 94$
13.  $230 \div 10 = 23$
14.  $460 \div 10 = 46$
15.  $150 \div 10 = 15$
16.  $7200 \div 10 = 720$
17.  $3680 \div 10 = 368$
18.  $7950 \div 10 = 795$
19.  $7410 \div 10 = 741$
20.  $2800 \div 10 = 280$
21.  $3030 \div 10 = 303$
22.  $5520 \div 10 = 552$
23.  $3650 \div 10 = 365$
24.  $2290 \div 10 = 229$
25.  $7450 \div 10 = 745$
26.  $7650 \div 10 = 765$
27.  $2680 \div 10 = 268$
28.  $8610 \div 10 = 861$
29.  $5070 \div 10 = 507$
30.  $7300 \div 10 = 730$



# Missing Number Multiplication and Division

1. 887
2. 3876
3. 760
4. 749
5. 572
6. 963
7. 612
8. 1748
9. 3425
10. 466
11. 1848
12. 683
13. 3952
14. 279
15. 2352
16. 2828
17. 3802
18. 1692
19. 7270
20. 1143
21. 3000
22. 7995
23. 23 265
24. 11 613
25. 6935
26. 4428
27. 25 506
28. 1244
29. 13 972
30. 46 935

# Solving Problems Involving an Understanding of Equals

1. Equation:  $22 \times 100 = \mathbf{5} \times 440$

2. Equation:  $25 \times 40 = 10 \times \mathbf{100}$


3. Equation:  $6 \times 23 = \mathbf{3} \times 46$

4. Equation:  $200 \times \mathbf{40} = 250 \times \mathbf{32}$

# Multiplication and Division


## Piggy Bank Problems

A. How many of each coin is in the piggy bank?




17

85c



29


\$1.45




38

\$7.60


B. How many of each coin is in the piggy bank?



\$1.70    20    7



\$9.20    50    31



\$10.60    16    13

C. How many of each coin could be in the piggy bank?



\$1.65    Any combination totalling \$1.67



\$3.05    Any combination totalling \$3.05




\$35.10    Any combination totalling \$35.10

D. How do these circumstances affect the amounts in these savers' piggy banks?



Sonia

\$8.20



Krystal

\$2.70

Sonia gives half of her money to Krystal.

\$4.10

\$6.80

They both save until they have doubled their money.

\$16.40

\$5.40

They add their money together and share it between themselves equally.

\$5.45

\$5.45

# Multiplying and Dividing Decimals by 10, 100 and 1000

Aim: Multiply and Divide decimal numbers by 10, 100 and 1000

Multiply the following numbers by 10, 100 and 1000 to complete the table.

	<b>x 10</b>	<b>x 100</b>	<b>x 1000</b>
5.7	57	570	5700
23.02	230.2	2302	23 020
0.92	9.2	92	920
0.306	3.06	30.6	306
24.67	246.7	2467	24 670

Divide the following numbers by 10, 100 and 1000 to complete the table.

	<b>÷ 10</b>	<b>÷ 100</b>	<b>÷ 1000</b>
43	4.3	0.43	0.043
219	21.9	2.19	0.219
703	70.3	7.03	0.703
64.8	6.48	0.648	0.0648
2560	256	25.6	2.56

Complete the following table.

	<b>x 10</b>	<b>÷ 10</b>	<b>÷ 100</b>
507	5070	50.7	5.07
17.6	176	1.76	0.176
6.3	63	0.63	0.063
203.7	2037	20.37	2.037
1.93	19.3	0.193	0.0193

# Multiplying and Dividing Decimals by 10, 100 and 1000

Aim: Multiply and Divide decimal numbers by 10, 100 and 1000

Multiply the following numbers by 10, 100 and 1000 to complete the table.

	<b>x 10</b>	<b>x 100</b>	<b>x 1000</b>
4.02	40.2	402	4020
0.045	0.45	4.5	45
34.094	340.94	3409.4	34 094
209.817	2098.17	20 981.7	209 817
0.006	0.06	0.6	6

Divide the following numbers by 10, 100 and 1000 to complete the table.

	<b>÷ 10</b>	<b>÷ 100</b>	<b>÷ 1000</b>
56.9	5.69	0.569	0.0569
209	20.9	2.09	0.209
4.56	0.456	0.0456	0.00456
709.6	70.96	7.096	0.7096
0.072	0.0072	0.00072	0.000072

Complete the following table.

	<b>x 1000</b>	<b>x 10</b>	<b>÷ 100</b>
607	607 000	6070	6.07
4 901	4 901 000	49 010	49.01
0.08	80	0.8	0.0008
17.809	17809	178.09	0.17809
37	37 000	370	0.37

