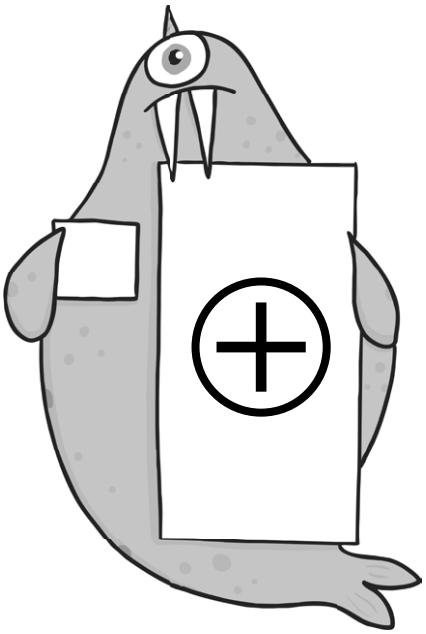
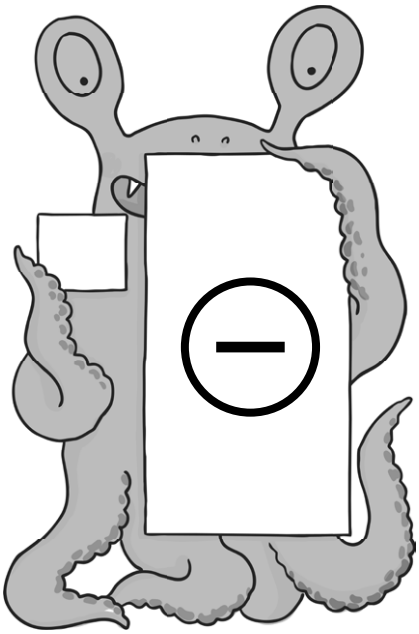
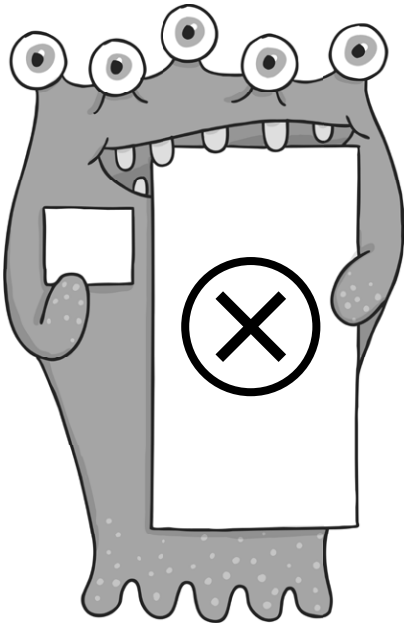
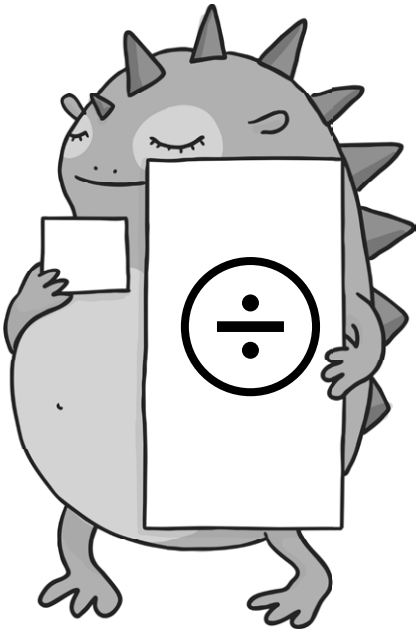
Year 6 Maths:

Addition, Subtraction, Multiplication and Division - Answers









Year 6 Maths:
Addition, Subtraction, Multiplication and Division

Year 6 Programme of Study – Addition, Subtraction, Multiplication and Division

Statutory Requirements	Worksheet	Page Number	Notes
multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication	Long Multiplication Practice 3 digits x 2 digits	3	
	Long Multiplication Practice 4 digits x 2 digits	4 - 5	
divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context	Long Division Practice Worksheet	6 - 8	
	Division Practice and Working with Remainders	9 - 10	
divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context	Short Division Practice Worksheet	11 - 12	
perform mental calculations, including with mixed operations and large numbers	Mental Maths – Addition	13 - 15	
	Mental Calculations Challenge 4 Operations	16 - 17	
identify common factors, common multiples and prime numbers	Find the common factors	18 - 19	
	Identifying Prime Numbers 1 – 200	20	
	Finding Common Multiples	21	
use their knowledge of the order of operations to carry out calculations involving the four operations	Using the Correct Order of Operations – Speed Challenge	22	
solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	Banana Bob's Fruit and Veg Stall	23 - 24	
	Solving Multi Step Word Problems	25 - 27	

Long Multiplication Practice – 3 Digits x 2 Digits: Answers

question	answer			
	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 x 2 Digits: Answers

question	answer			
	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**
	13. 2 3 1 6 x 9 0 **0** **2 0 8 4 4 0** **2 0 8 4 4 0**	**14.** 1 0 7 4 x 1 9 **9 6 6 6** **1 0 7 4 0** **2 0 4 0 6**	**15.** 2 1 9 6 x 4 5 **1 0 9 8 0** **8 7 8 4 0** **9 8 8 2 0**	**16.** 1 8 8 6 x 1 7 **1 3 2 0 2** **1 8 8 6 0** **3 2 0 6 2**

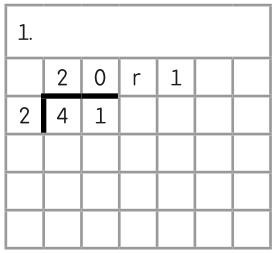
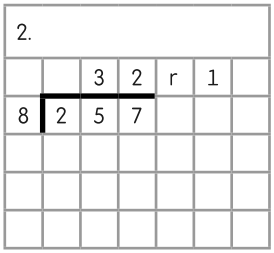
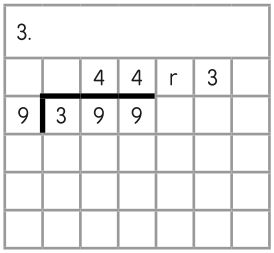
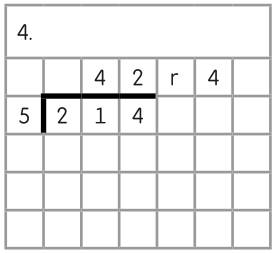
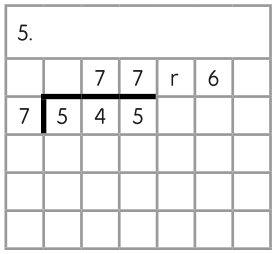
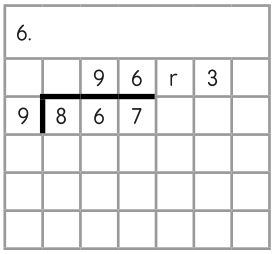
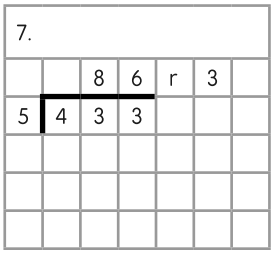
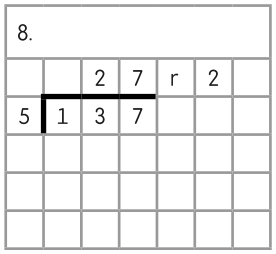
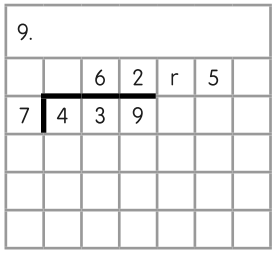
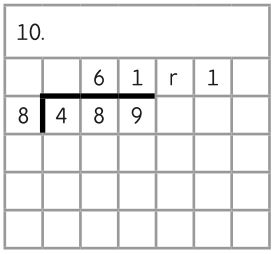
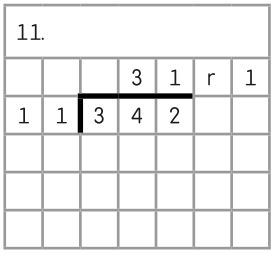
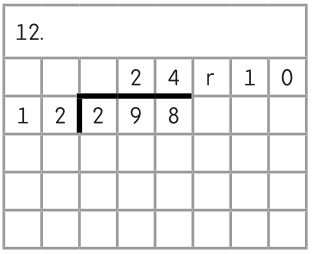
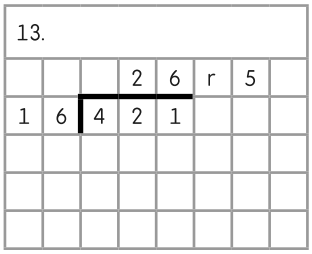
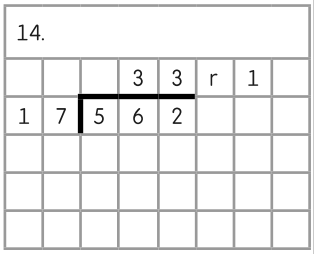
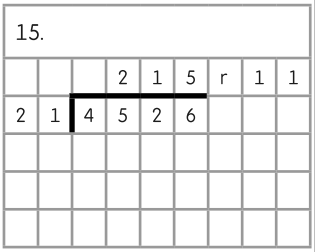
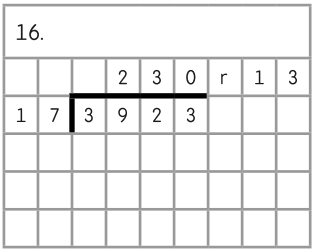
Long Division Practice Worksheet: Answers

question	answer
1	241 ÷ 17 = 14 r3
2	965 ÷ 31 = 31 r4
3	1415 ÷ 12 = 117 r11
4	4465 ÷ 19 = 235
5	1946 ÷ 31= 62 r24
6	1371 ÷ 40 = 34 r11
7	6527 ÷ 31 = 210 r17
8	4895 ÷ 46 = 106 r19
9	8572 ÷ 39 = 219 r31
10	9109 ÷ 50 = 182 r9
11	9758 ÷ 48 = 203 r14
12	15 245 ÷ 62 = 245 r55

Division Practice – Answers in Context: Answers

question	answer
1.	102.25
2.	39
3.	33
4.	114.106
5.	29 weeks
6.	210 5/18
7.	62
8.	202 boxes

Short Division Practice Worksheet: Answers

question	answer			
	1. 	2. 	3. 	4. 
	5. 	6. 	7. 	8. 
	9. 	10. 	11. 	12. 
	13. 	14. 	15. 	16. 

Mental Maths - Addition: Answers

question	answer
Sheet 1.	
1	70p
2	29
3	£7.50
4	85
5	100
6	£1.17
7	33
8	54kg
9	15
10	94
Sheet 2.	
1	140
2	75
3	£8
4	88
5	102
6	151
7	£1.71
8	69
9	No he will only have £28
10	705
Sheet 3.	
1	147
2	35+18=53 44+1=45
3	£8.32
4	208
5	362
6	£4.47
7	33
8	459
9	667
10	35+55=90 11+78=89

Mental Calculations Challenge – 4 Operations: Answers

question	answer
1	726.7
2	6
3	5
4	15.9
5	10 000.09
6	100
7	803
8	99.9
9	45.6
10	509
11	17
12	46 411
13	-26
14	411
15	54 610
16	388

Find the Common Factors: Task 1: Answers

question	answer
1	1
2	1, 2, 4, 8
3	1, 2, 3, 6
4	1, 3, 7

Find the Common Factors: Task 2: Answers

question	answer
1	1, 5
2	1, 2, 3, 6
3	1, 2, 4
4	1, 3, 9

Identifying Prime Numbers 1-200: Answers

question	answer
Prime Numbers from 0 - 200	

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
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200

Finding Common Multiples: Answers

question	answer
A.	
1	Multiples of 3: **3, 6, 9, 12** Multiples of 4: **4, 8, 12** LCM of 3 and 4 = **12**
2	Multiples of 3: **3, 6, 9, 12, 15, 18, 21, 24, 27** Multiples of 9: **9, 18, 27** LCM of 3 and 9 = **9**
3	Multiples of 2: **2, 4, 6, 8, 10, 12, 14, 16, 18, 20** Multiples of 5: **5, 10, 15, 20, 25** LCM of 2 and 5 = **10**
4	Multiples of 8: **8, 16, 24, 32, 40, 48, 56, 64** Multiples of 4: **4, 8, 12, 16, 20, 24, 28, 32** LCM of 8 and 4 = **8**
5	Multiples of 6: **6, 12, 18, 24, 30, 36, 42, 48, 54** Multiples of 9: **9, 18, 27, 36, 45, 54, 63, 72, 81** LCM of 6 and 9 = **18**
6	Multiples of 10: **10, 20, 30, 40, 50, 60, 70, 80** Multiples of 5: **5, 10, 15, 20, 25, 30, 35, 40** LCM of 10 and 5 = **10**
7	Multiples of 11: **11, 22, 33, 44, 55, 66, 77, 88** Multiples of 6: **6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66** LCM of 11 and 6 = **66**
8	Multiples of 7: **7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, 84, 91** Multiples of 13: **13, 26, 39, 52, 65, 78, 91** LCM of 7 and 13 = **91**
9	Multiples of 8: **8, 16, 24, 32, 40, 48** Multiples of 12: **12, 24, 36, 48, 60** LCM of 8 and 12 = **24**

Using the Correct Order of Operations – Speed Challenge: Answers

question	answer
1	50
2	42
3	90
4	9
5	31
6	3
7	19
8	33
9	14
10	45
11	7
12	19
13	8
14	80
15	48
16	9
17	25
18	14
19	4
20	57

Banana Bob's Fruit Shop: Answers

question	answer
Sheet 1.	
1	40p
2	49p
3	22p
4	96p
5	£2
6	42p
7	£1.50
8	£1.04
9	£1.80
10	£2.73
11	£4.13
12	£3.00
Cost of shopping altogether = **£18.69**	
Sheet 2	
Fruit Salad	150g of apples = **18p**
	300g of pineapples = **60p**
	250g of bananas = **18p** (17.5p rounded up)
	50g of cherries = **25p**
	200g of pears = **22p**
	Total cost = £1.43
Smoothie	125g of apples = **15p**
	300g of pineapples = **60p**
	250g of bananas = **18p** (17.5p rounded up)
	150g of cherries = **75p**
	125g of pears = **14p** (13.75p rounded up)
	250g watermelon = **38p** (37.5p rounded up)
	150g coconuts = **21p**
	Total cost = £2.41

Solving Multi Step Word Problems: Answers

question	answer
1	48 minutes
2	369 miles
3	£6.08
4	72 eggs
5	163 whiteboards
6	558m
7	£16.80
8	50 minutes
9	£7.35
10	91 days