Year 5

Arithmetic

Questions

by Richard Brown

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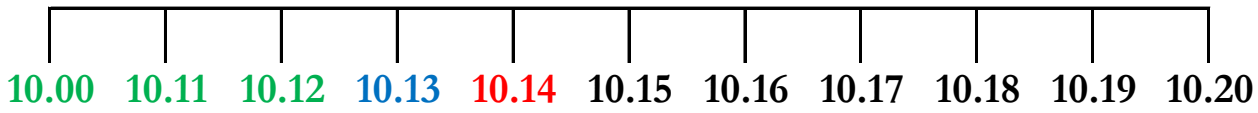
Key Language and Representations

Reasoning Scenarios are the arithmetic test questions applied to a real-life reasoning and problem solving scenario.

Number Lines are used to count forwards and backwards in whole, decimal numbers and fractional numbers.



Concrete Objects are manipulated or handled to calculate and represent a number sentence and enable understanding. E.g. a metric ruler.

Formal Written Methods set out working in columnar form.

Ladder Method

```
   1  2  9
x        7
-------------
      6  3
   1  4  0
+  7  0  0
   1
-------------
   9  0  3
-------------
```

Grid Method

x	200	60	7
4	800	240	28

Short Multiplication

```
   1  7  3
x        5
-------------
   3  1
-------------
   8  6  5
-------------
```

```
      1  3  0
x           9
-------------
      2
-------------
   1  1  7  0
-------------
```

Long Division

```
      0  6     7 r1
   ---------------
2 |  1  3  5
  -  0
  ------
     1  3
  -  1  2
  ------
        1  5
     -  1  4
     ------
           1
```

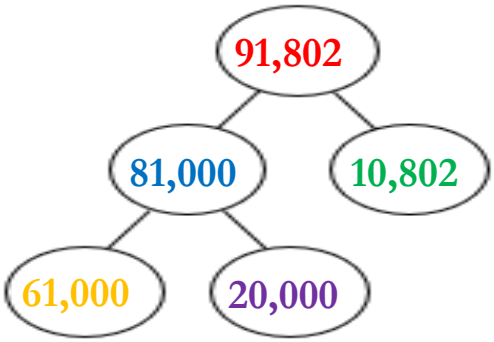
Short Division

```
      0  6  7  r 1
   ---------------
2 |  1  13 15
```

```
      0  4  3  r 1
   ---------------
4 |  1  17 13
```

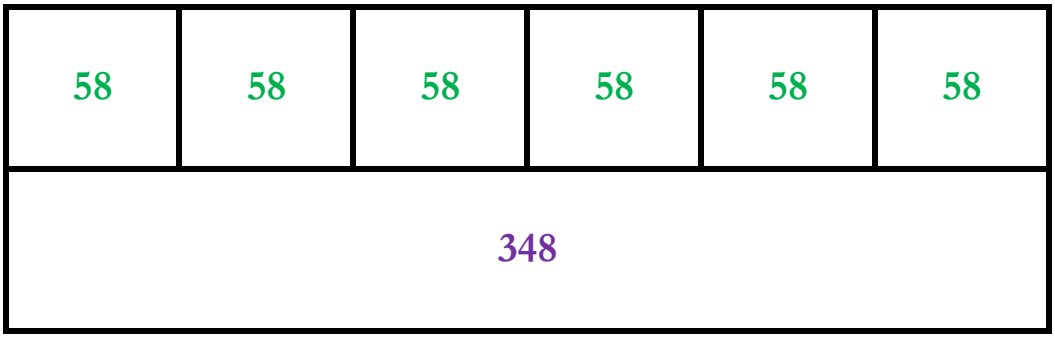
Strategy Applied is when formal written method is used to calculate an arithmetic question or a reasoning and problem solving scenario. Explained using appropriate mathematical language, proven using concrete objects that can be manipulated, shown with pictorial representations to visualise the calculations, enabling deeper understanding.

Part Whole Models are pictorial mathematical images to represent an arithmetic question or reasoning and problem solving scenario.

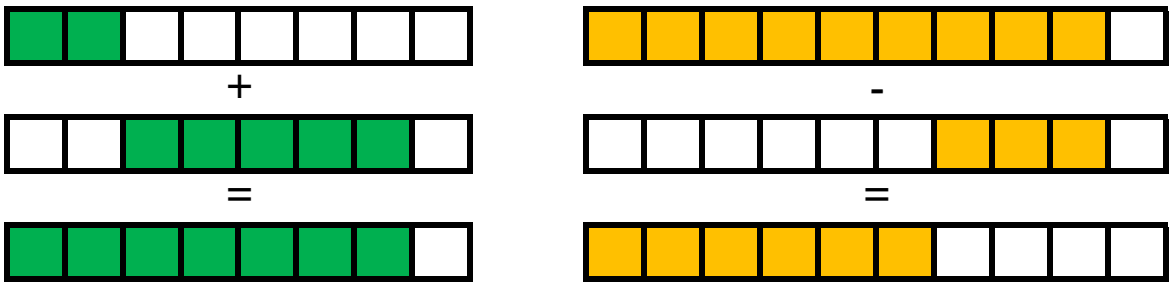


Bar Models are an image, that pictorially represents a calculation.

$$58 \times 6 = 548$$



$$\frac{2}{8} + \frac{5}{8} = \frac{7}{8} \qquad \frac{9}{10} - \frac{3}{10} = \frac{6}{10}$$



Number Grid

0	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

Multiplication Square

x	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0
1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100
11	22	33	44	55	66	77	88	99	110
12	24	36	48	60	72	84	96	108	120

Decimal Number Grid

0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9
3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9
4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9
5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9
6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9
7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9
8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9
9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9
10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9
11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9
12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9
13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9
14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9
15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9

Fraction Walls

1 Whole															
$\frac{1}{2}$								$\frac{1}{2}$							
$\frac{1}{4}$				$\frac{1}{4}$				$\frac{1}{4}$				$\frac{1}{4}$			
$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$	
$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$

1 Whole					
$\frac{1}{2}$				$\frac{1}{2}$	
$\frac{1}{3}$		$\frac{1}{3}$		$\frac{1}{3}$	
$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

1 Whole																			
$\frac{1}{2}$										$\frac{1}{2}$									
$\frac{1}{5}$				$\frac{1}{5}$				$\frac{1}{5}$				$\frac{1}{5}$				$\frac{1}{5}$			
$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$	
$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$	$\frac{1}{20}$

How Many

How many **1,000,000s** (millions), **100,000s** (hundred thousands) and **10,000s** (ten thousands) in each number?

1) 7,654,321 = ___

2) 5,124,619 = ___

3) 6,217,983 = ___

4) 9,353,774 = ___

5) 8,406,861 = ___

6) 3,537,902 = ___

7) 1,601,393 = ___

8) 2,721,548 = ___

9) 5,834,657 = ___

10) 6,095,372 = ___

Digit Value

What is the digit value of the **1,000,000s** (millions), **100,000s** (hundred thousands) and **10,000s** (tens thousands) in each number?

1) 7,654,321 = ___

2) 5,124,619 = ___

3) 6,217,983 = ___

4) 9,353,774 = ___

5) 8,406,861 = ___

6) 3,537,902 = ___

7) 1,601,393 = ___

8) 2,721,548 = ___

9) 5,834,657 = ___

10) 6,095,372 = ___

Compensate

1) 99 + 35 = ___

2) 999 + 479 = ___

3) 9,999 + 361 = ___

4) 98 + 205 = ___

5) 998 + 406 = ___

6) 9,998 + 2,100 = ___

7) 97 + 1,820 = ___

8) 997 + 3,009 = ___

9) 9,997 + 403 = ___

10) 96 + 140 = ___

11) 996 + 903 = ___

12) 9,996 + 8,036 = ___

13) 95 + 216 = ___

14) 995 + 1,307 = ___

15) 9,995 + 5,038 = ___

Multiples of 1,000s, 10,000s and 100,000s

1) 370,000 + 241,000 = ___

2) 230,000 + 370,000 = ___

3) 150,000 + 63,000 = ___

4) 105,000 + 326,000 = ___

5) 840,000 + 70,000 = ___

6) 370,000 + 95,000 = ___

7) 210,000 + 450,000 = ___

8) 150,000 + 75,000 = ___

9) 220,000 + 290,000 = ___

10) 840,000 + 55,000 = ___

11) ___ + 9,200 = 80,400

12) ___ + 4,006 = 29,006

13) ___ + 5,810 = 63,000

14) ___ + 2,510 = 40,050

Number Sequence

1) 12.2 12.5 12.8 ___ ___

2) -14 -8 -2 ___ ___

3) 30 45 60 ___ ___

4) 150 225 300 ___ ___

5) -500 -450 -400 ___ ___

6) -95 -60 -25 ___ ___

7) 0 1.9 2.8 ___ ___

8) 3.6 4.5 5.4 ___ ___

9) 1.0 1.9 2.8 ___ ___

10) -1.95 -1.05 -0.15 ___ ___

11) $\frac{1}{8}$ $\frac{3}{8}$ $\frac{5}{8}$ ___ ___

12) $\frac{1}{3}$ $\frac{4}{3}$ $\frac{7}{3}$ ___ ___

Decimals

1) 2.14 + 1.835 = ___

2) 1.36 + 2.513 = ___

3) 2.61 + 6.352 = ___

4) 7.58 + 1.416 = ___

5) 6.23 + 1.759 = ___

6) 4.75 + 2.138 = ___

7) 3.79 + 4.205 = ___

8) 6.13 + 3.982 = ___

9) 1.97 + 8.134 = ___

10) 3.65 + 3.256 = ___

11) ___ = 5.40 + 2.209

12) ___ = 6.70 + 3.348

13) ___ = 5.50 + 1.768

14) ___ = 7.20 + 1.952

Column Addition

1) 4 9 1 2 5 7
+ 2 1 8 2 7 8

2) 4 1 9 8 3 2
+ 3 9 6 2 7 1

3) 7 2 5 3 2
5 0 9 1 5
+ 3 3 3 3 7

3) 5 2 4 7 6 9
+ 2 8 0 1 5 5

4) 4 2 8 0 5 6
+ 2 1 5 3 7 6

6) 8 3 2 1 1
7 1 4 0 0
+ 4 7 2 3 4

5) 4 1 9 0 4 9
+ 3 8 1 3 7 3

8) 3 8 0 8 8 6
+ 2 5 6 2 1 5

9) 5 2 7 8 7
5 4 8 3 0
4 3 0 4 6
+ 2 5 6 8 3

10) 4 7 2 8 9 8
+ 2 1 9 8 7 4

11) 7 5 5 5 5 4
+ 6 6 7 7 7 8

14) 6 2 8 9 3
5 6 8 4 1
5 3 0 4 9
+ 1 5 6 9 9

12) 9 8 0 8 4 1
+ 8 8 3 3 3 4

13) 4 3 3 3 3 7
+ 3 0 0 0 5 5

Column Addition with Decimals

1) 38.453 + 15.271 = .

2) 28.337 + 14.248 = .

3) 55.43 + 37.23 + 28.14 = .

4) 37.457 + 28.365 = .

5) 35.479 + 18.283 = .

6) 80.74 + 29.16 + 5.86 = .

7) 79.840 + 53.669 = .

8) 44.560 + 26.348 = .

9) 79.57 + 63.58 + 54.40 + 48.26 = .

10) 50.604 + 38.468 = .

11) 40.506 + 26.387 = .

14) 79.68 + 64.58 + 64.50 + 29.16 = .

12) 86.938 + 77.848 = .

13) 23.127 + 9.638 = .

Find the Missing Number

1) 600 + 4,000 - 1,250 = ___

2) 900 + 5,000 - 2,250 = ___

3) 368,701 + 1,000 + 1,000 = ___

4) 499,999 + 1,000 + 1,000 = ___

5) 288,888 + 2,000 + 2,000 = ___

6) 479,999 + 2,000 + 2,000 = ___

7) 238,888 + 3,000 + 3,000 = ___

8) ___ + 5,314 = 7,314 - 1,000

9) ___ + 6,425 = 8,425 - 1,000

10) 500 + 6,000 - 8,150 = ___

11) 800 + 7,000 - 9,150 = ___

12) ___ + 3,528 = 9,528 - 2,000

13) ___ + 1,012 = 5,012 - 2,000

14) 738,035 + 7,000 + 7,000 = ___

Compensate

1) 101 - 45 = ___

2) 1,001 - 479 = ___

3) 102 - 61 = ___

4) 1,002 - 205 = ___

5) 103 - 46 = ___

6) 1,003 - 210 = ___

7) 104 - 82 = ___

8) 1,004 - 309 = ___

9) 105 - 43 = ___

10) 1,005 - 140 = ___

11) 106 - 93 = ___

12) 1,006 - 836 = ___

13) 107 - 16 = ___

14) 1,007 - 307 = ___

Multiples of 1,000s, 10,000s and 100,000s

1) 980,000 - 452,000 = ___

2) 760,000 - 48,000 = ___

3) 900,000 - 358,000 = ___

4) 750,000 - 60,000 = ___

5) 820,000 - 127,000 = ___

6) 980,000 - 193,000 = ___

7) 760,000 - 80,000 = ___

8) 800,000 - 781,000 = ___

9) 840,000 - 80,000 = ___

10) 820,000 - 796,000 = ___

11) 560,000 - 50,000 = ___

12) 900,000 - 672,000 = ___

13) 950,000 - 90,000 = ___

14) 930,000 - 685,000 = ___

Number Sequence

1) 15.9 15.5 15.1 ___ ___

2) 18 10 2 ___ ___

3) 63 57 51 ___ ___

4) 950 800 750 ___ ___

5) 325 200 75 ___ ___

6) -195 -260 -325 ___ ___

7) 5.2 4.5 3.8 ___ ___

8) 8.5 8 7.5 ___ ___

9) 11.9 11.7 11.5 ___ ___

10) -3.05 -5.05 -7.05 ___ ___

11) $\frac{8}{9}$ $\frac{6}{9}$ $\frac{4}{9}$ ___ ___

12) $\frac{9}{8}$ $\frac{7}{8}$ $\frac{5}{8}$ ___ ___

Decimals

1) 2.135 - 1.024 = ___

2) 2.579 - 1.358 = ___

3) 6.324 - 2.11 = ___

4) 7.546 - 1.43 = ___

5) 6.298 - 1.79 = ___

6) 4.719 - 2.108 = ___

7) 4.407 - 3.106 = ___

8) 6.105 - 3.004 = ___

9) 8.10 - 1.10 = ___

10) 3.605 - 3.203 = ___

11) ___ = 5.436 - 2.42

12) ___ = 6.718 - 3.13

13) ___ = 5.574 - 1.27

14) ___ = 7.203 - 1.20

Column Subtraction

1)	5	3	6	0	0
-	3	7	6	7	8

2)	6	6	7	0	0
-	3	6	8	0	5

3)	2	3	5	0	0
-	2	1	0	0	6

4)	8	3	0	9	7
-	5	4	1	6	3

5)	3	6	3	4	2
-	2	7	8	3	8

6)	4	5	6	7	9
-	2	7	7	3	5

7)	5	9	2	0	2
-	2	7	8	9	0

8)	9	8	3	0	7
-	2	7	6	9	0

9)	9	0	1	0	4
-	5	5	5	5	5

Column Subtraction with Decimals

1) 79.569 - 34.624	2) 45.755 - 26.866	3) 69.37 - 45.42
4) 95.756 - 46.539	5) 67.977 - 48.355	6) 56.89 - 39.44
7) 84.075 - 56.965	8) 73.000 - 44.899	9) 75.08 - 65.35
10) 80.490 - 56.863	11) 60.644 - 48.788	12) 90.58 - 63.55

Find the Missing Number

1) 3,200m - 1.65km = ___

2) £72 - £14.38 = ___

3) ___ - 475 = 9,760

4) ___ - 4,632 = 9,511

5) 357 = 457 - ___

6) 100 - ___ = 30

7) ___ = 4,650 - 1,000

8) 200,900 - 1,000 - 1,000 = ___

9) 301,301 - 1,000 - 1,000 = ___

10) Subtract three thousand, six hundred and one from four thousand and eighty five = ___

11) Subtract one hundred and five from three hundred and forty two = ___

12) 402,900 - 2,000 - 2,000 = ___

13) 501,900 - 3,000 - 3,000 = ___

14) 720,800 - 4,000 - 4,000 = ___

Multiples of 10

1) 40 x 5 = ___

2) 40 x 7 = ___

3) 50 x 8 = ___

4) 60 x 8 = ___

5) 70 x 8 = ___

6) 6 x 120 = ___

7) 3 x 110 = ___

8) 3 x 120 = ___

9) 4 x 110 = ___

10) 4 x 120 = ___

11) ___ = 210 x 2

12) ___ = 240 x 3

13) ___ = 320 x 4

14) ___ = 410 x 5

Multiples of 10

1) 60 x 40 = ___

2) 60 x 90 = ___

3) 50 x 80 = ___

4) 50 x 70 = ___

5) 50 x 60 = ___

6) 40 x 80 = ___

7) 30 x 70 = ___

8) 70 x 80 = ___

9) 70 x 70 = ___

10) 90 x 90 = ___

11) ___ = 110 x 10

12) ___ = 120 x 20

13) ___ = 210 x 30

14) ___ = 220 x 40

x10, x100 and x1,000

1) 2.13

2) 25.7

3) 632.4

4) 7.54

5) 62.9

6) 471.9

7) 4.47

8) 61.5

9) 810.2

10) 3.605

11) 54.36

12) 671.8

13) 5.574

14) 72.03

15) 613.9

Indices

1) $3^2 + 2^3 =$ ___

2) $4^2 + 2^3 =$ ___

3) $2^2 + 3^2$ ___

4) $3^2 + 4^2$ ___

5) $3^2 + 3^3 =$ ___

6) $4^2 + 4^3 =$ ___

7) $5^2 + 6^2$ ___

8) $5^2 + 7^2$ ___

9) $8^2 + 5^3 =$ ___

10) $9^2 + 5^3 =$ ___

11) $2^3 + 10^3$ ___

12) $2^3 + 5^3$ ___

13) $11^2 + 2^3 =$ ___

14) $10^2 + 2^3 =$ ___

Short Multiplication

1) 1 3 2 1 4 6
x 2

2) 2 1 0 5 3 7
x 3

3) 3 1 0 6 5 3
x 4

4) 4 3 0 0 2 5
x 5

5) 5 2 0 8 6 9
x 6

6) 6 1 3 9 1 2
x 7

7) 7 2 4 5 7 1
x 8

8) 8 2 1 6 0 7
x 9

Short Multiplication with Decimals

1) 13.246 x 5

2) 32.432 x 9

3) 4.32 x 8

4) 72.249 x 6

5) 53.458 x 5

6) 5.52 x 7

7) 93.356 x 7

8) 24.525 x 6

9) 86.23 x 5

Long Multiplication

1)
$$\begin{array}{r} 83 \\ \times\ 24 \\ \hline \\ +\ \\ \hline \\ \hline \end{array}$$

2)
$$\begin{array}{r} 137 \\ \times\ 24 \\ \hline \\ +\ \\ \hline \\ \hline \end{array}$$

3)
$$\begin{array}{r} 5478 \\ \times\ 28 \\ \hline \\ +\ \\ \hline \\ \hline \end{array}$$

4)
$$\begin{array}{r} 94 \\ \times\ 26 \\ \hline \\ +\ \\ \hline \\ \hline \end{array}$$

5)
$$\begin{array}{r} 458 \\ \times\ 36 \\ \hline \\ +\ \\ \hline \\ \hline \end{array}$$

6)
$$\begin{array}{r} 6757 \\ \times\ 49 \\ \hline \\ +\ \\ \hline \\ \hline \end{array}$$

Find the Missing Number

1) £2.75 x ___ = £35.00 - £7.50

2) £4.75 x ___ = £65.00 - £17.50

3) 60 x 40 = ___ x 30

4) 617 x 9 = ___ + 1,860

5) 4 x 4 x 4 = ___

6) 6 x 8 = ___ x 4

7) 8 x ___ = 96

8) 6 x 7 x 4 = ___

9) 506 x 7 = ___ + 1,753

10) 18 x 0 x 8 = ___

11) 7 x ___ = 63

12) 3 x 7 x 8 = ___

13) 2,106 x 3 = ___ + 2,453

14) 15 x 0 x 6 = ___

Multiples of 10

1) 330 ÷ 3 = ___

2) 360 ÷ 4 = ___

3) 350 ÷ 5 = ___

4) 360 ÷ 6 = ___

5) 420 ÷ 7 = ___

6) 320 ÷ 8 = ___

7) 360 ÷ 9 = ___

8) 240 ÷ 3 = ___

9) 240 ÷ 4 = ___

10) 250 ÷ 5 = ___

11) 630 ÷ 9 = ___

12) 270 ÷ 3 = ___

13) 480 ÷ 4 = ___

14) 600 ÷ 5 = ___

Multiples of 10

1) 4,200 ÷ 70 = ___

2) 4,800 ÷ 80 = ___

3) 3,500 ÷ 50 = ___

4) 5,500 ÷ 50 = ___

5) 4,500 ÷ 30 = ___

6) 4,800 ÷ 40 = ___

7) 1,500 ÷ 50 = ___

8) 4,200 ÷ 60 = ___

9) 7,200 ÷ 90 = ___

10) 4,000 ÷ 80 = ___

11) 5,500 ÷ 50 = ___

12) 5,400 ÷ 60 = ___

13) 8,100 ÷ 90 = ___

14) 9,600 ÷ 80 = ___

÷10, ÷100 and ÷1,000

1) 213

2) 257

3) 6324

4) 75

5) 62

6) 4719

7) 4

8) 6

9) 8102

10) 605

11) 54306

12) 6718

13) 55074

14) 7203

15) 60139

Short Division

1) 28,253 ÷ 9 = ___

2) 15,643 ÷ 9 = ___

3) 35,840 ÷ 8 = ___

4) 12,688 ÷ 8 = ___

5) 24,571 ÷ 7 = ___

6) 15,789 ÷ 7 = ___

7) 24,854 ÷ 6 = ___

8) 35,058 ÷ 6 = ___

9) 35,008 ÷ 4 = ___

10) 79,036 ÷ 4 = ___

Short Division with Decimals

1) 1.06 ÷ 4 = ___

2) 5.54 ÷ 4 = ___

3) 3.66 ÷ 6 = ___

4) 7.38 ÷ 6 = ___

5) 9.18 ÷ 3 = ___

6) 2.895 ÷ 3 = ___

7) 1.057 ÷ 7 = ___

8) 5.77 ÷ 7 = ___

9) 4.32 ÷ 8 = ___

10) 7.456 ÷ 8 = ___

Find the Missing Number

1) 3,500 ÷ 50 + 150 =

2) 100 - 60 ÷ 4 + 9 = ___

3) 3,200 ÷ 8 + 120 = ___

4) 3,200 ÷ 40 + 400 = ___

5) 3,600 ÷ 9 + 40 = ___

6) 3,600 ÷ 4 + 90 = ___

7) 40 - 36 ÷ 3 + 5 = ___

8) 180 - 78 ÷ 2 + 4 = ___

9) 12 + 7 x 4 ÷ 4 = ___

10) 100 - 26 ÷ 2 + 8 = ___

11) 320 ÷ 8 + 15 = ___

12) 4,800 ÷ 40 + 25 = ___

13) 360 ÷ 9 + 35 = ___

14) 360 ÷ 6 + 45 = ___

To Nearest 10,000

1) 5,469,109 = ___

2) 9,270,864 = ___

3) 9,878,135 = ___

4) 5,888,063 = ___

5) 2,173,639 = ___

6) 1,081,482 = ___

7) 1,043,068 = ___

8) 2,010,207 = ___

9) 3,870,671 = ___

10) 6,561,112 = ___

11) 6,320,849 = ___

12) 8,721,920 = ___

13) 9,087,451 = ___

14) 2,936,204 = ___

To Nearest 100,000

1) 5,469,109 = ___

2) 9,270,864 = ___

3) 9,878,135 = ___

4) 5,888,063 = ___

5) 2,173,639 = ___

6) 1,081,482 = ___

7) 1,043,068 = ___

8) 2,010,207 = ___

9) 3,870,671 = ___

10) 6,561,112 = ___

11) 6,320,849 = ___

12) 8,721,920 = ___

13) 9,087,451 = ___

14) 2,936,204 = ___

To Nearest 1,000,000

1) 5,469,109 = ___

2) 9,270,864 = ___

3) 6,878,135 = ___

4) 5,888,063 = ___

5) 2,173,639 = ___

6) 1,081,482 = ___

7) 1,043,068 = ___

8) 2,010,207 = ___

9) 3,870,671 = ___

10) 6,561,112 = ___

11) 6,320,849 = ___

12) 8,721,920 = ___

13) 9,087,451 = ___

14) 2,936,204 = ___

Percentage of a Quantity

1) 42% of 90 = ___

2) 76% of 60 = ___

3) 75% of 66 = ___

4) 38% of 78 = ___

5) 91% of 60 = ___

6) 63% of 40 = ___

7) 55% of 46 = ___

8) 35% of 98 = ___

9) 71% of 80 = ___

10) 33% of 20 = ___

11) 12% of 950 = ___

12) 89% of 250 = ___

13) 98% of 240 = ___

14) 34% of 460 = ___

Fraction of a Quantity

1) $\frac{3}{5}$ of 2 metres = ___

2) $\frac{2}{3}$ of 63km = ___

3) $\frac{3}{7}$ of 2800m = ___

4) $\frac{1}{3}$ of £5.07 = ___

5) $\frac{3}{7}$ of 700 = ___

6) $\frac{5}{6}$ of 120 = ___

7) $\frac{3}{8}$ of £120 = ___

8) $\frac{1}{4}$ of 308 = ___

9) $\frac{1}{8}$ of £7.20 = ___

10) $\frac{4}{7}$ of £14 = ___

Add Fractions

1) $\frac{2}{3} + \frac{4}{5} = \frac{\quad}{\quad}$

2) $\frac{3}{5} + \frac{5}{6} = \frac{\quad}{\quad}$

3) $\frac{3}{4} + \frac{11}{12} = \frac{\quad}{\quad}$

4) $\frac{1}{3} + \frac{5}{12} = \frac{\quad}{\quad}$

5) $\frac{1}{4} + \frac{5}{6} = \frac{\quad}{\quad}$

6) $\frac{1}{2} + \frac{1}{12} = \frac{\quad}{\quad}$

7) $\frac{1}{4} + \frac{5}{8} = \frac{\quad}{\quad}$

8) $\frac{2}{6} + \frac{7}{12} = \frac{\quad}{\quad}$

9) $\frac{1}{5} + \frac{5}{15} = \frac{\quad}{\quad}$

10) $\frac{2}{10} + \frac{7}{30} = \frac{\quad}{\quad}$

Subtract Fractions

1) $\frac{3}{4} - \frac{1}{10} = \_\_\_$

2) $\frac{3}{4} - \frac{3}{10} = \_\_\_$

3) $\frac{2}{3} - \frac{1}{12} = \_\_\_$

4) $\frac{2}{3} - \frac{1}{6} = \_\_\_$

5) $\frac{2}{3} - \frac{1}{9} = \_\_\_$

6) $\frac{2}{3} - \frac{2}{9} = \_\_\_$

7) $\frac{3}{4} - \frac{7}{10} = \_\_\_$

8) $\frac{2}{5} - \frac{2}{6} = \_\_\_$

9) $\frac{7}{12} - \frac{2}{6} = \_\_\_$

10) $\frac{2}{3} - \frac{4}{9} = \_\_\_$

Multiply Fractions

1) $\frac{5}{8} \times 2 = \_\_\_$

2) $\frac{5}{7} \times 6 = \_\_\_$

3) $\frac{3}{8} \times 3 = \_\_\_$

4) $\frac{1}{5} \times 6 = \_\_\_$

5) $\frac{1}{6} \times 3 = \_\_\_$

6) $\frac{1}{5} \times 4 = \_\_\_$

7) $\frac{1}{6} \times 5 = \_\_\_$

8) $\frac{3}{7} \times 8 = \_\_\_$

Multiply Mixed Fractions

1) $4\ \frac{2}{5} \times 3 = \_\_\_$

2) $4\ \frac{1}{3} \times 3 = \_\_\_$

3) $5\ \frac{5}{6} \times 2 = \_\_\_$

4) $2\ \frac{3}{5} \times 5 = \_\_\_$

5) $2\ \frac{1}{3} \times 4 = \_\_\_$

6) $3\ \frac{5}{6} \times 4 = \_\_\_$

7) $2\ \frac{4}{5} \times 3 = \_\_\_$

8) $4\ \frac{1}{3} \times 5 = \_\_\_$

Find The Missing Number

1) $\frac{1}{4} \times 2 = \frac{1}{8} + \frac{\quad}{8}$

2) $\frac{4}{9} + \frac{2}{3} = 1 + \frac{\quad}{9}$

3) $\frac{2}{3} \times 4 = \frac{\quad}{15}$

4) $\frac{3}{8} + \frac{\quad}{\quad} = 1\ \frac{1}{8}$

5) $\frac{1}{5} + \frac{3}{5} + \frac{2}{10} = \frac{\quad}{20}$

6) $5\ \frac{\quad}{7} = \frac{37}{\quad}$

7) $\frac{2}{7}$ of $\frac{\quad}{\quad} = 40$

8) $1\ \frac{1}{4} - \frac{\quad}{\quad} = \frac{7}{8}$

9) $\frac{3}{4} - \frac{\quad}{8} = \frac{1}{2}$

10) £35 = $\frac{2}{\quad}$ of £87.50

Answers

P. 1

1) 7 million, 6 hundred thousands, 5 ten thousands, 4 thousand, 3 hundreds, 2 tens, 1 ones
2) 5 million, 1 hundred thousands, 2 ten thousands, 4 thousand, 6 hundreds, 1 tens, 9 ones
3) 6 million, 2 hundred thousands, 1 ten thousands, 7 thousand, 9 hundreds, 8 tens, 3 ones
4) 9 million, 3 hundred thousands, 5 ten thousands, 3 thousand, 7 hundreds, 7 tens, 4 ones
5) 8 million, 4 hundred thousands, 0 ten thousands, 6 thousand, 8 hundreds, 6 tens, 1 ones
6) 3 million, 5 hundred thousands, 3 ten thousands, 7 thousand, 9 hundreds, 0 tens, 2 ones
7) 1 million, 6 hundred thousands, 0 ten thousands, 1 thousand, 3 hundreds, 9 tens, 3 ones
8) 2 million, 7 hundred thousands, 2 ten thousands, 1 thousand, 5 hundreds, 4 tens, 8 ones
9) 5 million, 8 hundred thousands, 3 ten thousands, 4 thousand, 6 hundreds, 5 tens, 7 ones
10) 6 million, 0 hundred thousands, 9 ten thousands, 5 thousand, 3 hundreds, 7 tens, 2 ones

P. 2

1) 7,000,000, 600,000, 50,000, 4,000, 300, 20, 1
2) 5,000,000, 100,000, 20,000, 4,000, 600, 10, 9
3) 6,000,000, 200,000, 10,000, 7,000, 900, 80, 3
4) 9,000,000, 300,000, 50,000, 3,000, 700, 70, 4
5) 8,000,000, 400,000, 6,000, 800, 60, 1
6) 3,000,000, 500,000, 30,000, 7,000, 900, 2
7) 1,000,000, 600,000, 1,000, 300, 90, 3
8) 2,000,000, 700,000, 20,000, 1,000, 500, 40, 8
9) 5,000,000, 800,000, 30,000, 4,000, 600, 50, 7
10) 6,000,000, 90,000, 5,000, 300, 70, 2

Answers

P. 3

1) 134
2) 1,478
3) 10,360
4) 303
5) 1,404
6) 12,098
7) 1,917
8) 4,006
9) 10,400
10) 236
11) 1,899
12) 18,032
13) 311
14) 2,302
15) 15,033

P. 4

1) 611,000
2) 600,000
3) 213,000
4) 331,000
5) 910,000
6) 465,000
7) 660,000
8) 225,000
9) 510,000
10) 895,000
11) 89,600
12) 33,012
13) 68,810
14) 42,560

P. 5

1) 13.1, 13.4
2) 4, 10
3) 75, 90
4) 375, 450
5) -350 -300
6) 10, 45
7) 5.7, 7,6
8) 6.3, 7.2
9) 3.7, 4.6
10) 0.75, 1.65
11) $\frac{7}{8}$, $1\frac{1}{8}$
12) 4, $5\frac{1}{3}$

P. 6

1) 3.915
2) 3.863
3) 8.962
4) 8.996
5) 7.989
6) 6.888
7) 7.995
8) 10.112
9) 10.104
10) 6.906
11) 7.609
12) 10.048
13) 7.268
14) 9.152

P. 17

1) 709,535
2) 816,103
3) 156,784
4) 643,432
5) 790,422
6) 201,845
7) 692,772
8) 1,423,332
9) 176,346
10) 733,392
11) 1,367,852
12) 2,018,468
13) 1,763,474
14) 188,482

P. 8

1) 53.724
2) 42.585
3) 120.80
4) 53.762
5) 133.509
6) 115.76
7) 89.072
8) 66.893
9) 245.81
10) 32.765
11) 120.804
12) 115.772
13) 245.824
14) 237.92

P. 9

1) 5,850
2) 8,150
3) 370,701
4) 501,999
5) 292,888
6) 483,999
7) 244,888
8) 1,000
9) 1,000
10) 2,350
11) 1,650
12) 4,000
13) 2,000
14) 752,035

P. 10

1) 56
2) 522
3) 41
4) 797
5) 57
6) 793
7) 22
8) 695
9) 62
10) 865
11) 13
12) 70
13) 91
14) 700

Answers

P. 11

1) 528,000
2) 712,000
3) 542,000
4) 690,000
5) 693,000
6) 787,000
7) 680,000
8) 19,000
9) 760,000
10) 24,000
11) 510,000
12) 228,000
13) 860,000
14) 245,000

P. 12

1) 14.7, 14.3
2) -6 -14
3) 45, 39
4) 700, 650
5) -50 -175
6) -390 -455
7) 3.1, 2.4
8) 7.0, 6.5
9) 11.1, 10.7
10) -9.05 -11.05
11) $\frac{2}{9}$, 0
12) $\frac{3}{8}$, $\frac{1}{8}$

P. 13

1) 1.111
2) 1.221
3) 4.214
4) 6.116
5) 4.508
6) 2.611
7) 1.301
8) 3.101
9) 7
10) 0.402
11) 3.016
12) 3.605
13) 4.304
14) 6.003

P. 14

1) 15,922
2) 29,898
3) 2,494
4) 28,934
5) 8,504
6) 17,944
7) 31,312
8) 70,617
9) 34,549

P. 15

1) 44.945
2) 18.889
3) 23.95
4) 49.217
5) 19.622
6) 17.45
7) 27.110
8) 28.101
9) 9.73
10) 23.627
11) 11.856
12) 27.03

P. 16

1) 1.55km
2) 57.62
3) 10,235
4) 14,143
5) 100
6) 70
7) 3,650
8) 98,900
9) 299,301
10) 484
11) 237
12) 398,900
13) 495,900
14) 712,800

P. 17

1) 200
2) 280
3) 400
4) 480
5) 280
6) 720
7) 330
8) 360
9) 440
10) 480
11) 420
12) 720
13) 1,280
14) 2,050

P. 18

1) 2,400
2) 5,400
3) 4,000
4) 3,500
5) 3,000
6) 3,200
7) 2,100
8) 5,600
9) 4,900
10) 8,100
11) 1,100
12) 2,400
13) 6,300
14) 8,800

Answers

P. 19

1) 21.3, 213, 2,130
2) 257, 2,570, 25,700
3) 6,324, 63,240, 632,400
4) 75.4, 754, 7,540
5) 629, 6,290, 62,900
6) 4,719, 47,190, 471,900
7) 44.7, 447, 4,470
8) 615, 6,150, 61,500
9) 8,102, 81,020, 810,200
10) 36.05, 360.5, 3,605
11) 543.6, 5,436, 54,360
12) 6,718, 67,180, 671,800
13) 55.74, 557.4, 5,574
14) 720.3, 7,203, 72.030
15) 6,139, 61,390, 613,900

P. 20

1) 17
2) 24
3) 13
4) 25
5) 36
6) 80
7) 61
8) 74
9) 189
10) 206
11) 1,008
12) 133.0
13) 129
14) 108

P. 21

1) 264,292
2) 631,611
3) 1,242,612
4) 2,150,125
5) 3,125,214
6) 4,297,384
7) 5,796,568
8) 7,394,463

P. 22

1) 66.230
2) 290.888
3) 34.56
4) 433.494
5) 267.290
6) 38.64
7) 653.492
8) 147.150
9) 431.15

P. 23

1) 1,992
2) 3,288
3) 153,384
4) 2,444
5) 16,488
6) 331,093

P. 24

1) 10
2) 10
3) 80
4) 3,693
5) 64
6) 12
7) 12
8) 168
9) 1,789
10) 0
11) 9
12) 168
13) 3,865
14) 0

P. 25

1) 110
2) 90
3) 70
4) 60
5) 60
6) 40
7) 40
8) 80
9) 60
10) 50
11) 70
12) 90
13) 120
14) 120

Answers

P. 26

1) 60
2) 60
3) 70
4) 110
5) 150
6) 120
7) 30
8) 70
9) 80
10) 50
11) 110
12) 90
13) 90
14) 120

P. 27

1) 21.3, 2.13, 0.213
2) 25.7, 2.57, 0.257
3) 632.4, 63.24, 6.324
4) 7.5, 0.75, 0.075
5) 6.2, 0.62, 0.062
6) 471.9, 47.19, 4.719
7) 0.4, 0.04, 0.004
8) 0.6, 0.06, 0.006
9) 810.2, 81.02, 8.102
10) 60.5, 6.05, 0.0605
11) 5430.6, 543.06, 54.306
12) 671.8, 67.18, 6.718
13) 5,507.4, 550.74, 55.074
14) 720.3, 72.03, 7.203
15) 6013.9, 601.39, 60.139

P. 28

1) 3,139 r2
2) 1,738 r1
3) 4,480
4) 1,586
5) 351 r1
6) 2,255 r4
7) 4,142 r2
8) 5,843
9) 8,752
10) 19,759

P. 29

1) 0.265
2) 1.385
3) 0.61
4) 1.23
5) 3.06
6) 0.965
7) 0.151
8) 0.824
9) 0.54
10) 0.932

P. 30

1) 220
2) 76
3) 160
4) 480
5) 80
6) 180
7) 23
8) 137
9) 19
10) 79
11) 55
12) 145
13) 75
14) 105

P. 31

1) 5,470,000
2) 9,270,000
3) 9,880,000
4) 5,890,000
5) 2,170,000
6) 1,080,000
7) 1,040,000
8) 2,010,000
9) 3,870,000
10) 6,560,000
11) 6,320,000
12) 8,720,000
13) 9,090,000
14) 2,940,000

P. 32

1) 5,500,000
2) 9,300,000
3) 9,900,000
4) 5,900,000
5) 2,200,000
6) 1,100,000
7) 1,000,000
8) 2,000,000
9) 3,900,000
10) 6,600,000
11) 6,300,000
12) 8,700,000
13) 9,100,000
14) 3,000,000

Answers

P. 33

1) 5,000,000
2) 9,000,000
3) 7,000,000
4) 6,000,000
5) 2,000,000
6) 1,000,000
7) 1,000,000
8) 2,000,000
9) 4,000,000
10) 7,000,000
11) 6,000,000
12) 9,000,000
13) 9,000,000
14) 3,000,000

P. 34

1) 37.8
2) 45.6
3) 49.5
4) 29.64
5) 54.6
6) 25.2
7) 25.3
8) 34.3
9) 56.8
10) 6.6
11) 114
12) 222.5
13) 235.2
14) 156.4

P. 35

1) 120cm
2) 42km
3) 1,200m
4) £1.69
5) 300
6) 100
7) £45.00
8) 77.00
9) £0.90
10) £8.00

P. 36

1) $\frac{22}{15}$ or $1\frac{7}{15}$
2) $\frac{43}{30}$ or $1\frac{13}{30}$
3) $\frac{20}{12}$ or $1\frac{2}{3}$
4) $\frac{9}{12}$ or $\frac{3}{4}$
5) $\frac{13}{12}$ or $1\frac{1}{12}$
6) $\frac{7}{12}$
7) $\frac{7}{8}$
8) $\frac{11}{12}$
9) $\frac{8}{15}$
10) $\frac{13}{30}$

P. 37

1) $\frac{13}{20}$
2) $\frac{9}{20}$
3) $\frac{7}{12}$
4) $\frac{3}{6}$ or $\frac{1}{2}$
5) $\frac{5}{9}$
6) $\frac{4}{9}$
7) $\frac{1}{20}$
8) $\frac{2}{30}$ or $\frac{1}{15}$
9) $\frac{3}{12}$ or $\frac{1}{4}$
10) $\frac{2}{9}$

Answers

P. 38

1) $\frac{8}{10}$ or $1\frac{1}{4}$

2) $\frac{30}{7}$ or $4\frac{2}{7}$

3) $\frac{9}{8}$ or $1\frac{1}{8}$

4) $\frac{6}{5}$ or $1\frac{1}{5}$

5) $\frac{3}{6}$ or $\frac{1}{2}$

6) $\frac{4}{5}$

7) $\frac{5}{6}$

8) $\frac{24}{7}$ or $3\frac{3}{7}$

P. 39

1) $\frac{66}{5}$ or $13\frac{1}{5}$

2) $\frac{39}{3}$ or 13

3) $\frac{70}{6}$ or $11\frac{2}{3}$

4) $\frac{65}{5}$ or 13

5) $\frac{28}{3}$ or $9\frac{1}{3}$

6) $\frac{92}{6}$ or $15\frac{1}{3}$

7) $\frac{42}{5}$ or $8\frac{2}{5}$

8) $\frac{65}{3}$ or $21\frac{2}{3}$

P. 40

1) 3
2) 1
3) 40
4) $\frac{6}{8}$
5) 20
6) 2 and 7
7) 140
8) $\frac{3}{8}$
9) 2
10) 5