

PLACE VALUE OF DIGITS

5

TARGET To identify the place value of each digit in a number.

The value of a digit depends upon its place in the number.

Example

3 579 268

	M	HTH	TTh	Th	H	T	U
	3	5	7	9	2	6	8
	↓	↓	↓	↓	↓	↓	↓
Value of digits	3 000 000	500 000	70 000	9 000	200	60	8

A

Copy and complete by writing the missing number in the box.

- 1 $23\,735 = 20\,000 + 3\,000 + \square + \square + 5$
- 2 $15\,267 = \square + 5\,000 + \square + 60 + \square$
- 3 $42\,491 = \square + \square + 400 + \square + 1$
- 4 $78\,024 = \square + 8\,000 + \square + \square$
- 5 $31\,986 = 30\,000 + \square + \square + \square + \square$

Give the value of each digit as in the first five problems.

- 6 86 182
- 7 97 043
- 8 54 578
- 9 29 310
- 10 63 659
- 11 48 021
- 12 30 486
- 13 12 903
- 14 85 237
- 15 73 194

B

Write down the value of the digit underlined.

- 1 749 153
- 2 14 637
- 3 1 282 482
- 4 961 790
- 5 2438 014
- 6 4830 569
- 7 1 377 921
- 8 123 246
- 9 5 006 478
- 10 1 665 705
- 11 2 512 334
- 12 497 697
- 13 7045 022
- 14 3 780 856
- 15 9 259 180

Add 4000 to:

- 16 1 185 360
- 17 329 511
- 18 2 477 362

Add 2 000 000 to:

- 19 15 178
- 20 5 209 364
- 21 37

Take 500 from:

- 22 1 937 820
- 23 275 138
- 24 3 420 000

Take 30 000 from:

- 25 2 625 000
- 26 130 070
- 27 5 000 000

C

Write the answers only.

- 1 $2\,384\,700 + 50\,000$
- 2 $11\,509\,264 - 3\,000\,000$
- 3 $23\,167\,535 + 8\,000$
- 4 $19\,384\,000 - 600\,000$
- 5 $52\,186 + 2\,000\,000$
- 6 $17\,000\,000 - 90\,000$
- 7 $9\,999\,999 + 13$
- 8 $32\,500\,000 - 4\,000$
- 9 $17\,968\,019 + 70\,000$

Add 60 000 to:

- 10 1 053 827
- 11 15 992 310
- 12 86 247 200

Take 7000 from:

- 13 27 312 649
- 14 18 085 130
- 15 2 000 000

Add 9 000 000 to:

- 16 7 809 157
- 17 23 790
- 18 31 583 104

Take 800 000 from:

- 19 11 390 000
- 20 17 523 169
- 21 20 000 000

TARGET To compare and order numbers.

Example

Arrange 76 053, 104 760, 75 063 in ascending order.

Compare the highest value digits first, then the next highest and so on.

The correct order is 75 063, 76 053, 104 760.



A

Put these sets of numbers in order, starting with the smallest.

- 1 13 173 17 313 11 737 13 337
- 2 24 229 22 492 22 924 24 292
- 3 18 555 15 585 18 518 15 558
- 4 66 727 67 276 67 627 66 772
- 5 39 353 35 593 35 935 39 335

Copy and complete.

- 6 $23\,750 + \square = 29\,750$
- 7 $56\,018 - \square = 16\,018$
- 8 $92\,843 + \square = 93\,543$
- 9 $14\,307 - \square = 13\,807$
- 10 $45\,962 + \square = 105\,962$
- 11 $182\,610 - \square = 174\,610$

B

Put these numbers in ascending order.

- 1 116 017 117 106 11 670 11 607
- 2 483 383 433 838 438 388 438 338
- 3 744 774 747 747 744 747 747 477
- 4 2 739 379 2 733 937 2 937 397 2 737 793
- 5 5 265 256 5 256 565 5 255 665 5 262 525
- 6 1 001 010 1 010 010 1 101 001 1 001 001

Copy and complete.

- 7 $721\,386 - \square = 715\,386$
- 8 $530\,274 + \square = 1\,330\,274$
- 9 $2\,104\,509 - \square = 2\,095\,509$
- 10 $1\,649\,328 + \square = 1\,719\,328$
- 11 $3\,015\,694 - \square = 15\,694$
- 12 $6\,908\,830 + \square = 6\,913\,830$

C

Work out the halfway number.

- 1 $83\,960 \leftarrow \square \rightarrow 84\,100$
- 2 $217\,500 \leftarrow \square \rightarrow 220\,000$
- 3 $1\,560\,000 \leftarrow \square \rightarrow 1\,630\,000$
- 4 $493\,900 \leftarrow \square \rightarrow 500\,000$
- 5 $9\,850\,000 \leftarrow \square \rightarrow 10\,850\,000$
- 6 $3\,400\,000 \leftarrow \square \rightarrow 6\,000\,000$

Copy and complete.

- 7 $2\,380\,000 - \square = 2\,375\,800$
- 8 $14\,175\,937 - \square = 13\,905\,937$
- 9 $30\,572\,100 - \square = 10\,272\,100$
- 10 $6\,059\,283 - \square = 5\,999\,283$
- 11 $24\,366\,150 - \square = 22\,866\,150$
- 12 $10\,000\,000 - \square = 6\,999\,990$

TARGET To round whole numbers to the required degree of accuracy.

Examples

Rounding to the nearest 10

Rounding to the nearest 100

Rounding to the nearest 1000

Rounding to the nearest 10 000

427 536 → 427 540

427 536 → 427 500

427 536 → 428 000

427 536 → 430 000

(6 > 5, round up)

(3 < 5, round down)

(5 so round up)

(7 > 5, round up)

A

Round the following numbers to the nearest:

10

1 3276

2 4853

3 11 308

4 59 762

5 28 195

6 43 417

100

7 5048

8 22 290

9 79 917

10 51 884

11 116 452

12 208 735

1000

13 3710

14 38 265

15 42 537

16 329 641

17 157 490

18 860 823

10 000

19 51 829

20 25 060

21 49 512

22 103 700

23 607 188

24 580 936

100 000

25 183 500

26 647 039

27 462 746

28 928 907

29 354 158

30 993 600

B

Round to the nearest:

a) 10 b) 1000.

1 65 934

2 34 207

3 181 673

4 409 045

5 3 730 498

6 1 027 521

Round to the nearest:

a) 100 b) 100 000.

7 336 829

8 682 192

9 905 360

10 561 947

11 819 653

12 953 270

13 4 248 038

14 2 727 416

15 6 070 350

16 3 994 083

17 1 457 109

18 9 303 456

Round to the nearest:

a) 10 000 b) million.

19 2 826 000

20 8 591 370

21 1 387 294

22 7 405 068

23 9 940 952

24 5 269 107

C

Give the area of each ocean rounded to the nearest:

a) 1 million square kilometres

b) 10 million square kilometres.

1 Pacific Ocean 155 557 000 km²

2 Atlantic Ocean 76 762 000 km²

3 Indian Ocean 68 556 000 km²

4 Southern Ocean 20 327 000 km²

5 Arctic Ocean 14 056 000 km²

Write the world population for each of the following years rounded to:

a) 10 million b) 100 million.

6 1960 3 038 413 000

7 1970 3 696 186 000

8 1980 4 453 007 000

9 1990 5 306 425 000

10 2000 6 122 770 000

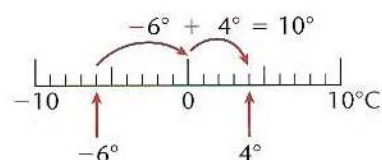
11 2010 6 895 889 000

TARGET To use negative numbers and calculate intervals across zero.

Examples

Find the temperature which is 10°C more than -6°C .

Answer 4°C .

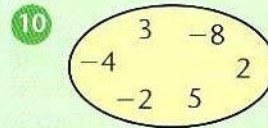
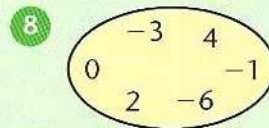
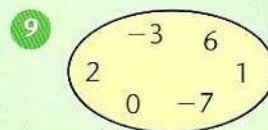
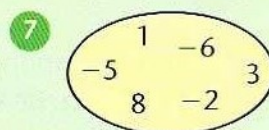


A

Copy and complete.

- 1 $-4 \quad -3 \quad -2 \quad \square \quad \square \quad \square \quad 2$
- 2 $6 \quad 4 \quad 2 \quad 0 \quad \square \quad \square \quad \square$
- 3 $-12 \quad -9 \quad -6 \quad -3 \quad \square \quad \square \quad \square$
- 4 $3 \quad 2 \quad 1 \quad \square \quad \square \quad \square \quad -3$
- 5 $-5 \quad \square \quad \square \quad \square \quad 3 \quad 5 \quad 7$
- 6 $16 \quad 12 \quad 8 \quad 4 \quad \square \quad \square \quad \square$

Put each set of numbers in order, smallest first.



B

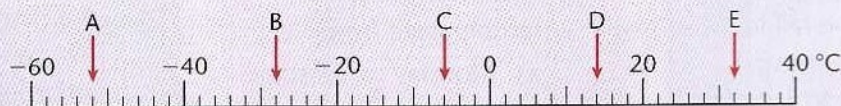
Copy and complete.

- 1 $10 \quad 7 \quad 4 \quad \square \quad \square \quad \square$
- 2 $-6 \quad -4 \quad \square \quad \square \quad \square \quad 4$
- 3 $-15 \quad \square \quad -5 \quad \square \quad 5 \quad \square$
- 4 $\square \quad \square \quad \square \quad 2 \quad 6 \quad 10$
- 5 $5 \quad 3 \quad 1 \quad \square \quad \square \quad \square$
- 6 $\square \quad \square \quad \square \quad 2 \quad 5 \quad 8$

Find the temperature which is:

- 7 5°C more than -2°C
- 8 8°C more than -10°C
- 9 7°C more than -3°C
- 10 4°C more than -4°C
- 11 9°C more than -7°C
- 12 6°C more than -8°C
- 13 10°C less than 6°C
- 14 7°C less than 2°C
- 15 9°C less than 0°C
- 16 12°C less than 4°C
- 17 8°C less than 7°C
- 18 6°C less than -5°C .

C



- 1 What temperatures are shown by the letters?
- 2 Give the difference in temperature between:
 - a) C and D
 - b) B and C
 - c) A and E
 - d) B and D
- 3 What would the temperature be if it was:
 - a) at A and rose 24°C
 - b) at D and fell 30°C
 - c) at C and fell 18°C
 - d) at B and rose 32°C ?