

Place value

Given the number 47823,

- a) What is the place value of the figure 7?

7000 (or seven thousand)

- b) What is the place value of the figure 2?

20 (or twenty)

Given the number 207.0439,

- c) What is the place value of the figure 9?

0.0009 (or nine ten thousandths)

- d) What is the place value of the figure 4?

0.04 (or four hundredths)

- e) Write 417056 using words.

four hundred and seventeen thousand, and fifty six

Comparing numbers

Rewrite in ascending order:

- a) 9, 17, 3, 11, 13

3, 9, 11, 13, 17

- b) 0.4, 0.42, 0.24, 0.04, 0.024

0.024, 0.04, 0.24, 0.4, 0.42

Rewrite in descending order:

- c) 4, -2, -3, 2, -7

4, 2, -2, -3, -7

Use =, <, or > to compare the numbers:

- d) 50134 < 50304

- e) 0.62 > 0.071

- f) -5.2 < 1.8

Prime numbers

- a) Identify the prime numbers:

5, 8, 9, 11, 12, 23

Express as a product of primes, using indices where appropriate:

- b) $30 = 2 \times 3 \times 5$

- c) $24 = 2^3 \times 3$

- e) $231 = 3 \times 7 \times 11$

Common factors

- a) List the common factors of 12 and 30

1, 2, 3, 6

Find the highest common factor of:

- b) 15 and 24 = 3

- c) 18 and 42 = 6

- d) 36 and 65 = 1

Common multiples

Find the lowest common multiple of:

- a) 3 and 7 = 21

- b) 8 and 10 = 40

- c) 12 and 15 = 60

Calculation

Use a handwritten method to calculate:

- a) $277 + 146 = 423$

- b) $527 - 346 = 181$

- c) $7 \times 38 = 266$

- d) $2718 \div 9 = 302$

Order of operations

Evaluate:

- a) $7 + 3 \times 4 = 19$

- b) $17 - 4^2 + 6 = 7$

- c) $2 \times 7 - 10 \div 5 = 12$

- d) $11 - (2 - 6)^2 = -5$

- e) $2 + 7 \times 10 - 5 = 67$

Directed numbers

Evaluate:

- a) $-5 + 8 = 3$

- b) $7 - (-4) = 11$

- c) $3 \times (-6) = -18$

- d) $(-18) \div (-2) = 9$

- e) $(-4) \times (-2) \times (-3) = -24$

Standard form

Write as an ordinary number:

- a) $3 \times 10^2 = 300$

- b) $1.72 \times 10^6 = 1720000$

- c) $8 \times 10^{-3} = 0.008$

- d) $6.03 \times 10^{-2} = 0.0603$

Write in standard form:

- e) $4702 = 4.702 \times 10^3$

- f) $0.000101 = 1.01 \times 10^{-4}$

- g) $9 = 9 \times 10^0$

- h) $845000 = 8.45 \times 10^5$

Write in correct standard form:

- i) $53.7 \times 10^2 = 5.37 \times 10^3$

- j) $0.0014 \times 10^{-2} = 1.4 \times 10^{-5}$