

- 1 Write 0.0000574 in standard form.

$$\begin{aligned} 0.0000574 &= 5.74 \div 10^5 \\ &= 5.74 \times 10^{-5} \end{aligned}$$

$$5.74 \times 10^{-5}$$

..... [1]

- 2 Calculate.

$$\begin{aligned} \frac{3.07 + 2^4}{5.03 - 1.79} &= \frac{3.07 + 16}{3.24} \\ &= \frac{19.07}{3.24} \\ &= 5.885802... \\ &\approx 5.89 \end{aligned}$$

$$5.89$$

..... [1]

- 3 Write 3.5897 correct to 4 significant figures.

$$3.590$$

$$3.590$$

..... [1]

- 4 A quadrilateral has rotational symmetry of order 2 and no lines of symmetry.

Write down the mathematical name of this quadrilateral.

Parallelogram

..... [1]

- 5 8 9 10 11 12 13 14 15 16

From the list of numbers, write down

- (a) the square numbers,

$$9, 16$$

..... [1]

- (b) a prime factor of 99.

$$11$$

..... [1]

- 6 Simplify.

$$\begin{aligned} \left(\frac{1}{2}x^{\frac{2}{3}}\right)^3 &= \frac{1^3}{2^3} \cdot x^{\frac{2}{3} \cdot 3} \\ &= \frac{1}{8}x^2 \end{aligned}$$

$$\frac{1}{8}x^2$$

..... [2]