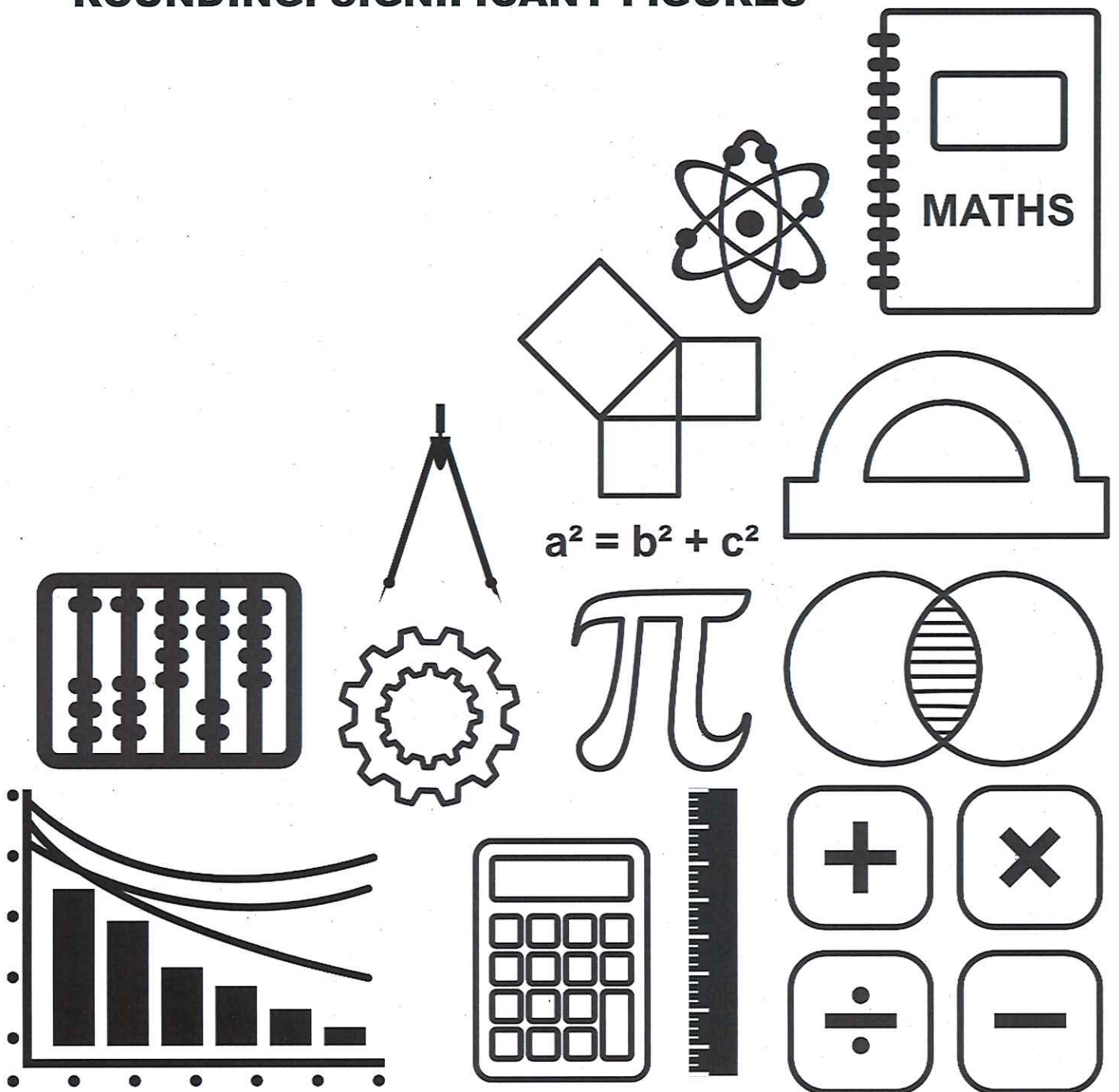


MATHSDIY

SOLUTIONS

GCSE TOPIC BOOKLET

ROUNDING: SIGNIFICANT FIGURES



1. a) Write down 4823 correct to 1 significant figure.
5000
 (1)

b) Write down 7583 correct to 2 significant figures.
7600
 (1)

2. a) Write down 0.063732 correct to 3 significant figures.
0.0637
 (1)

b) Write down 7934 correct to 2 significant figures.
7900
 (1)

3. a) Write down 839.7 correct to 3 significant figures.
840
 (1)

b) Write down 0.03426 correct to 2 significant figures.
0.034
 (1)

c) Write down 0.07849 correct to 1 significant figure.
0.08
 (1)

4. a) Write down 74.8612 correct to 3 significant figures.

74.9

(1)

b) Write down 6.0432 correct to 2 significant figures.

6.0

(1)

5. a) Write down 3742 correct to 3 significant figures.

3740

(1)

b) Write down 0.06731 correct to 2 significant figures.

0.067

(1)

6. a) Write down 45.3475 correct to 3 significant figures.

45.3

(1)

b) Write down 7462 correct to 2 significant figures.

7500

(1)

c) Write down 7.49163 correct to 2 significant figures.

7.5

(1)

7. a) Write down 23.68267 correct to 3 significant figures

23.7

(1)

b) Write down 38 741 correct to 2 significant figures.

39 000

(1)

8. Find the value of

a) $\frac{43.73 \times 26.23}{523.9 - 26.74}$, giving your answer correct to three significant figures.

$= 2.30718 \dots$ $= 2.31$

(2)

b) $\sqrt{(24.6 - 13.8)^3}$, giving your answer correct to two significant figures.

$= 35.4924 \dots$ $= 35$

(2)

c) $\sqrt{(4.3^3 \div 52)}$, giving your answer correct to three significant figures.

$= 1.23651 \dots$ $= 1.24$

(2)

9. Find the value of the following, giving each answer correct to **four** significant figures.

a) $5.8^2 - 4.79 + \sqrt{34.5} \div 9.64$

$= 30.7417 \dots = \underline{\underline{30.74}}$

(2)

b) $\frac{854.7}{(43.2-37.6)^3}$

$= 4.8668 \dots = \underline{\underline{4.867}}$

(2)

10. Find the value of the following, giving each answer correct to **two** significant figures.

a) $\sqrt{25.6^3 - 17.2}$

$= 129.4604 \dots = \underline{\underline{130}}$

(2)

b) $\frac{5.2^2 - \sqrt{46}}{4}$

$= 5.06441 \dots = \underline{\underline{5.1}}$

(2)