

Order of Operations

For AQA GCSE Mathematics (8300) • Foundation tier

Name _____

Total marks: **23**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method. Do not use a calculator unless told to.

1 Work out

(a) $3 + 4 \times 5$

[1 mark]

Answer _____

(b) $(3 + 4) \times 5$

[1 mark]

Answer _____

(c) $20 - 12 \div 4$

[1 mark]

Answer _____

(d) 2×3^2

[1 mark]

Answer _____

2 Circle the value of $10 - 2 \times 3 + 1$

[1 mark]

25

5

3

15

3 Circle the calculation that has an answer of 12

[1 mark]

$2 + 2 \times 3$

$(2 + 2) \times 3$

$2 \times 2 + 3$

$2 \times (2 + 3)$

4 Work out $\frac{18 + 6}{4 \times 2}$

[2 marks]

Answer _____

5 Jack says,
' $8 + 2 \times 5 = 50$ '

Is Jack correct? Tick a box.
Give a reason for your answer.

[1 mark]

☐ Yes

☐ No

6 Put one pair of brackets into each calculation to make it correct.

(a) $5 + 6 \times 2 - 3 = 19$

[1 mark]

(b) $12 \div 3 + 1 \times 4 = 12$

[1 mark]

7 Work out $(7 - 3)^2 + \sqrt{25}$

[2 marks]

Answer _____

8 (a) Use your calculator to work out $\frac{4.2 + 3.6^2}{\sqrt{5.3 - 1.7}}$
Write down all the figures on your calculator display.

[2 marks]

Answer _____

(b) Give your answer to part (a) to 1 decimal place.

[1 mark]

Answer _____

- 9** Using each of the numbers 2, 3 and 4 once, and any operations and brackets, make the number 20

[2 marks]

Answer _____

- 10** Work out $6 + 3 \times (8 - 5)^2 \div 9$

[2 marks]

Answer _____

- 11** Amy and Ben work out $24 \div 4 \times 2$

Amy says the answer is 3

Ben says the answer is 12

Who is correct? Give a reason for your answer.

[1 mark]

- 12** Write the numbers 3, 4 and 5 in the boxes to make each calculation correct.
Use each number once in each calculation.

(a) $\boxed{} + \boxed{} \times \boxed{} = 19$

[1 mark]

(b) $(\boxed{} + \boxed{}) \times \boxed{} = 27$

[1 mark]