

Q1.

In the circle write +, −, ×, or ÷ to make the calculation correct.

$$18 \bigcirc 3 \times 5 = 30$$

1 mark

Q2.

A theme park sells tickets online.

Each ticket costs £24

There is a £3 charge for buying tickets.

Which of these shows how to calculate the total cost, in pounds?

Tick **one**.

number of tickets \times 3 + 24

number of tickets \times 24 + 3

number of tickets + 3 \times 24

number of tickets + 24 \times 3

1 mark

Q3.

Put **brackets** into this expression to make it correct.

$$10^2 \div 10 \div 10 \div 10 \div 10 = 100$$

1 mark

Q4.

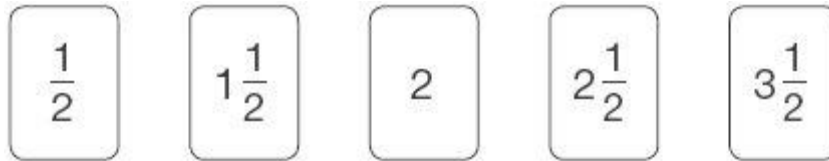
Write in what the missing numbers could be.

$$\left(\boxed{} \div \boxed{} \right) + 90 = 100$$

1 mark

Q5.

Here are five number cards.



Use **three** of the number cards to make this calculation correct.

$$\left(\boxed{} + \boxed{} \right) \times \boxed{} = 10$$

1 mark

Q6.

Write what the missing numbers could be.

$$120 = 100 + \left(\boxed{} - \boxed{} \right)$$

1 mark

Q7.

Write the missing number.

$$6 + 2 \times 2 - \boxed{} = 6$$

1 mark

Q8.

Write the correct sign $>$, $<$ or $=$ in each of the following.

$$(10 + 5) - 9 \quad \boxed{} \quad (10 + 9) - 5$$

$$3 \times (4 + 5) \quad \boxed{} \quad (3 \times 4) + 5$$

$$(10 \times 4) \div 2 \quad \boxed{} \quad 10 \times (4 \div 2)$$

2 marks

Q9.

Write the missing numbers.

$$48 \div (19 - \boxed{}) = 4$$

1 mark

$$\boxed{} + 6 \times 8 = 56$$

1 mark

Q10.

Write what the **two missing** numbers could be.

$$\boxed{} \div \boxed{} = 8$$

1 mark

Write what the **two missing** numbers could be.

$$(4 + \boxed{}) \times \boxed{} = 100$$

1 mark

Write the missing number.

$$30 - 16 = 9 + \boxed{}$$

1 mark

Q11.

Write the missing numbers to make these calculations correct.

$$200 \times \boxed{} - 200 = 200$$

1 mark

$$(100 - \boxed{}) \times 100 = 100$$

1 mark

Mark schemes

Q1.

$$18 \oplus 3 \times 5 = 30$$

[1]

Q2.

Second box only ticked correctly, as shown:

number of tickets \times 3 + 24	<input type="checkbox"/>
number of tickets \times 24 + 3	<input checked="" type="checkbox"/>
number of tickets + 3 \times 24	<input type="checkbox"/>
number of tickets + 24 \times 3	<input type="checkbox"/>

Accept alternative unambiguous positive indication of the correct answer, e.g. Y.

[1]

Q3.

Brackets inserted correctly, eg

$$10^2 \div (10 \div 10) \div (10 \div 10) = 100$$

OR

$$10^2 \div [(10 \div 10) \div 10] \div 10 = 100$$

OR

$$(10^2 \div 10) \div [(10 \div 10) \div 10] = 100$$

OR

$$10^2 \div \{10 \div [10 \div (10 \div 10)]\} = 100$$

OR

$$10^2 \div [10 \div (10 \div 10) \div 10] = 100$$

OR

$$10^2 \div [10 \div 10 \div (10 \div 10)] = 100$$

Accept alternative placing of brackets provided the original expression is unchanged and the answer is mathematically correct.

[1]

Q4.

Any pair of numbers with quotient 10, eg

$$\left(\boxed{20} \div \boxed{2} \right) + 90 = 100$$

Numbers must be in correct order.

[1]

Q5.

$$\left(\boxed{1\frac{1}{2}} + \boxed{3\frac{1}{2}} \right) \times \boxed{2}$$

OR

$$\left(\boxed{\frac{1}{2}} + \boxed{3\frac{1}{2}} \right) \times \boxed{2\frac{1}{2}}$$

Numbers in brackets may be given in either order.

Accept equivalent fractions or decimals.

Do not accept use of the same card twice, eg

$$\left(\boxed{2\frac{1}{2}} + \boxed{2\frac{1}{2}} \right) \times \boxed{2}$$

[1]

Q6.

Any two numbers with a difference of 20, eg

$$120 = 100 + \left(\boxed{45} - \boxed{25} \right)$$

Accept answers including fractions or decimals.

[1]

Q7.

4

[1]

Q8.

Award **TWO** marks for signs written in the order shown:

<

>

=

If the answer is incorrect, award **ONE** mark for two out of three signs correct.

Up to 2

[2]

Q9.

7

1

8

1

[2]

Q10.

- (a) Any two numbers such that the first is eight times the second, eg:

$$\boxed{16} \div \boxed{2} = 8$$

Numbers must be in the correct order.

Accept $8 \div 1$

Accept other recognised formats for writing a division problem

only if all the numbers are shown in the correct location, eg:

$$\frac{16}{2} = 8 \quad \text{OR}$$

$$2 \overline{)16}$$

Accept correct fractions, decimals and negative numbers.

1

- (b) Any two numbers which make the equation correct, eg:

$$(4 + \boxed{6}) \cdot \boxed{10} = 100$$

Accept $(4 + 0) \times 25 = 100$

Accept blank boxes provided the answer is elsewhere on the page.

Accept correct fractions, decimals and negative numbers.

1

- (c) $30 - 16 = 9 + \boxed{5}$

Accept blank box provided the answer is elsewhere on the page.

1

[3]

Q11.

2

1

99

1

[2]