Weekly check: Year 9 part 1

Year 9 | Key Stage 3 | Part 1: the first third of the year | 20 questions, 50 marks

KS3 Maths weekly check

Scan for the solutions

Name: _____ **Date:** _____ **Score:** _____ **/ 50**

1 Work out an estimate for the value of

$$\frac{39.6 \times 5.12}{0.48}$$

You must show your working.

(3 marks)

Answer _____

2 Kofi makes two jugs of orange squash.

Jug A: 150 ml of squash mixed with 600 ml of water.
Jug B: 200 ml of squash mixed with 900 ml of water.

Which jug has the stronger taste of orange? Show your working by writing each ratio of squash to water in the form $1 : n$

(2 marks)

Answer _____

3

a. Work out $\frac{3}{5}$ of 2 km. Give your answer in metres.

b. Work out $\frac{5}{12}$ of an hour. Give your answer in minutes.

c. Sana has a 2 kg bag of flour. She uses $\frac{3}{8}$ of the flour to bake bread. How many grams of flour are left in the bag?

(3 marks)

Answer _____

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4 Write

a. 0.4 as a percentage,

b. 135% as a decimal.

(2 marks)

Answer _____

5 Work out $3\frac{1}{3} \div 2\frac{1}{2}$

Give your answer as a mixed number in its simplest form.

(3 marks)

Answer _____

6 Work out each of these. Give each answer in its simplest form.

a. $\frac{4}{5} \div 2$

b. $\frac{3}{7} \div 6$

c. $\frac{5}{8} \div \frac{15}{16}$

(3 marks)

Answer _____

7

a. Write $(5^3)^4$ as a single power of 5

b. Write down the value of 8^0

(2 marks)

Answer _____

8 Work out $(9 \times 10^8) \div (3 \times 10^{-2})$

Give your answer in standard form.

(2 marks)

Answer _____

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9 a. Write the ratio 8 : 28 in the form 1 : n

b. A school has 15 teachers and 360 pupils. Write the ratio of teachers to pupils in the form 1 : n

(2 marks)

Answer _____

10 Write

a. 35% as a fraction in its simplest form,

b. $\frac{3}{25}$ as a percentage.

(2 marks)

Answer _____

11 Ravi is choosing between two vouchers for the same online shop.

Voucher A gives 24% off a £75 order.

Voucher B gives 32% off a £55 order.

Which voucher saves more money?

You must show your working.

(3 marks)

Answer _____

12 Write down two numbers, both greater than 20, whose highest common factor (HCF) is 7

(2 marks)

Answer _____

13 Ellie scored 17 out of 20 in a French test. She scored 42 out of 50 in a Spanish test.

In which test did Ellie do better? You must show your working.

(3 marks)

Answer _____

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14 a. Work out an estimate for 62.3×4.87

b. You are given that $623 \times 487 = 303{,}401$
Use this fact to write down the exact value of 62.3×4.87

(3 marks)

Answer _____

15 3 identical machines take 10 hours to print an order of leaflets.
Work out how long 5 of these machines would take to print the same order.

(2 marks)

Answer _____

16 Rosa puts £3000 into a savings account.
The account pays 2% compound interest per year.
Work out the value of her savings at the end of 2 years.

(2 marks)

Answer _____

17 a. Write 507,000 in standard form.

b. Write 2.6×10^{-3} as an ordinary number.

(2 marks)

Answer _____

18 Work out how many positive whole numbers less than 100 are multiples of both 4 and 6.

(3 marks)

Answer _____

19 a. Kai scored 18 out of 25 in a spelling test. Write his score as a percentage.

b. Write £6 as a percentage of £40

(2 marks)

Answer _____

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20 Tia and Sam each ran 100 m.

Tia's time was 12.4 seconds, correct to 1 decimal place.
Sam's time was 12.4 seconds, truncated to 1 decimal place.

a. Write down the error interval for Tia's time, t seconds.

b. Write down the error interval for Sam's time, s seconds.

c. Tia says, "I definitely ran faster than Sam." Is Tia right? Give a reason for your answer. (4 marks)

Answer _____

End of questions | Total 50 marks

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