

Weekly check: Grade 3

Grade 3 | Foundation | 20 questions, 50 marks

GCSE Maths weekly check



Scan for the solutions

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

1 Expand $p(p - 6)$ (2 marks)

Answer _____

2 Here are the midnight temperatures, in °C, on five nights.

-5 2 -3 4 -3

Work out the mean temperature. (2 marks)

Answer _____

3 A fair eight-sided spinner has sections numbered 1 to 8.

The spinner is spun once.

a. Write down the word that best describes the probability that the spinner lands on 9.

b. Find the probability that the spinner lands on a multiple of 3. (2 marks)

Answer _____

4 Write $<$ or $>$ in each box to make each statement true.

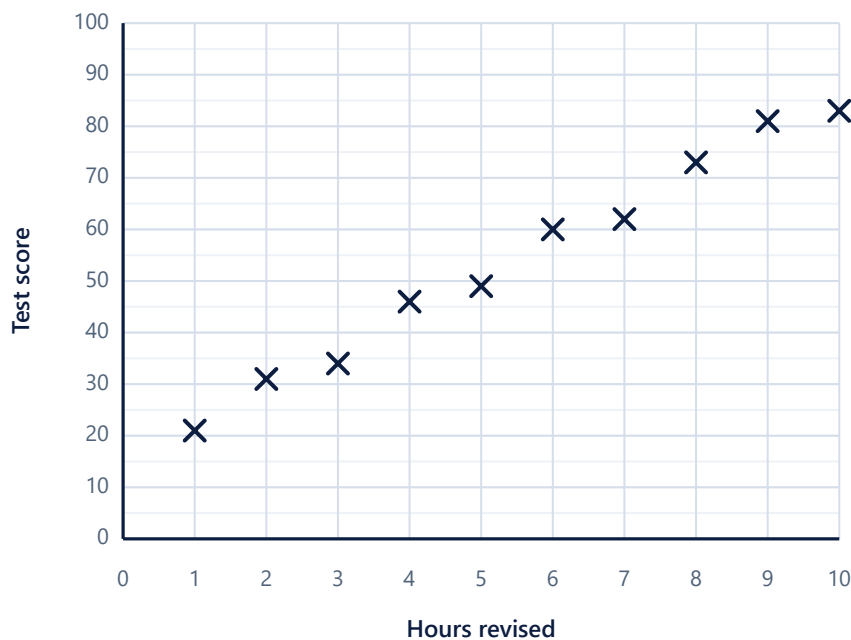
a. $0.34 \square 0.4$

b. $2.5 \square 2.45$ (2 marks)

Answer _____

5 The scatter graph shows the number of hours ten students revised and their scores in a test.

- Draw a line of best fit on the scatter graph.
- Use your line of best fit to estimate the test score of a student who revised for 6.5 hours.



(3 marks)

Answer _____

6 a. $(-2) \times (-3) \times (-4)$

b. $-48 \div 6 \div (-2)$

(2 marks)

Answer _____

7 $PQRS$ is a parallelogram.

Angle $P = (3x + 15)^\circ$ and angle $Q = (2x - 10)^\circ$. Angles P and Q are next to each other on the same side of the parallelogram.

Work out the value of x . Give a reason for each stage of your working.

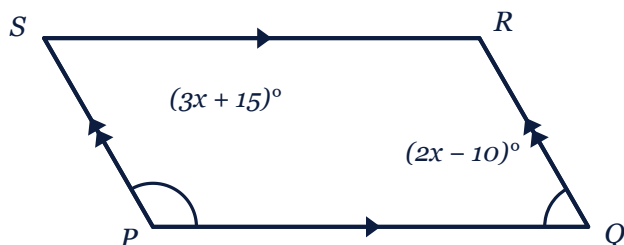


Diagram NOT accurately drawn

(3 marks)

Answer _____

8 Solve $5x - 7 = 23$

(2 marks)

Answer _____

9 a. Simplify $4 \times 3h$

b. Simplify $9a + 2b - 3a + b$

(2 marks)

Answer _____

- 10** An isosceles trapezium has parallel sides of 4 cm and 16 cm.
Its two sloping sides are each 10 cm long.
Its area is 80 cm^2 .
- Work out the perpendicular height of the trapezium.
 - Work out the perimeter of the trapezium.

(4 marks)

Answer _____

- 11** In triangle ABC , the point D lies on the side BC , so that BDC is a straight line. Angle $ADB = 112^\circ$ and angle $DAC = 30^\circ$.
- Work out the size of angle ADC . Give a reason for your answer.
 - Work out the size of angle ACD . Give a reason for your answer.

(3 marks)

Answer _____

- 12**
- Work out an estimate for the value of $\frac{9.72 \times 5.3}{0.48}$
 - Given that $1.8^4 = 10.4976$, write down the value of 18^4
 - Write down the value of 5^{-2}

(4 marks)

Answer _____

- 13** Potatoes cost £1.20 per kilogram.
Work out the cost of 3.5 kg of potatoes.

(2 marks)

Answer _____

- 14 A triangle has vertices at (1, 2), (3, 2) and (3, 5).
The triangle is reflected in the line $x = 4$.
Write down the coordinates of the vertices of the image.

(2 marks)

Answer _____

- 15 A swimming pool is a cuboid 10 m long, 5 m wide and 1.5 m deep.
The empty pool is filled with water at a rate of 2.5 m^3 every minute.
Work out how many minutes it takes to fill the pool completely.

(3 marks)

Answer _____

- 16 a. Write 0.0865 correct to 2 decimal places.
b. Write 9.996 correct to 2 decimal places.

(2 marks)

Answer _____

- 17 A model car is made using a scale of 1 : 18.
The real car is 4.5 m long.
Work out the length of the model car. Give your answer in centimetres.

(2 marks)

Answer _____

- 18 a. One of these fractions is **not** equivalent to $\frac{3}{5}$

$$\frac{6}{10} \quad \frac{9}{15} \quad \frac{12}{25} \quad \frac{15}{25}$$

Write down this fraction.

- b. Work out $\frac{2}{5} + \frac{1}{3}$

(3 marks)

Answer _____

19 $T = 4x + 3y$

Work out the value of T when $x = 5$ and $y = 2$.

(2 marks)

Answer _____

20 A rope is 14.4 m long.

It is cut into pieces that are each 0.8 m long.

How many pieces are there?

(3 marks)

Answer _____

End of questions | Total 50 marks