

**Edexcel GCSE Mathematics 2024 Foundation Paper 3 Revision Worksheet****Instructions**

- Answer all questions. **You may use a calculator.** Show all working clearly in the spaces provided. Give answers to 3 significant figures unless otherwise stated.
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**Section A: Essential Questions**

1. Why is it important to show all steps in your calculations during a maths exam?
2. How does using a calculator help to avoid errors in multi-step calculations?

**Section B: Multiple Choice Questions**

1. What is the value of  $\frac{3}{4} + \frac{2}{5}$ ?

a)  $\frac{5}{9}$

b)  $\frac{23}{20}$

c)  $\frac{19}{20}$

d)  $\frac{7}{9}$

2. Which of the following is equivalent to  $16^{3/4}$ ?

a) 8

b) 32

c) 4

d)  $8^2$

3. The solution to  $2x + 5 = 17$  is:

a)  $x = 6$

b)  $x = 11$

c)  $x = 12$

d)  $x = -6$

**4. What is the gradient of the line  $y = 5x - 2$ ?**

- a)  $-2$
- b)  $2$
- c)  $5$
- d)  $-5$

**5. If  $f(x) = 2x^2 - 3x + 1$ , what is  $f(2)$ ?**

- a)  $3$
- b)  $5$
- c)  $7$
- d)  $1$

**6. Sarah is baking a cake. The recipe for 12 cupcakes requires 300 g of flour. How much flour is needed to make 30 cupcakes using the same recipe?**

- a) 750 g
- b) 900 g
- c) 600 g
- d) 1,200 g

**7. A fruit punch is made by mixing orange juice and pineapple juice in the ratio 2:3. If you use 400 ml of orange juice, how much pineapple juice should you add?**

- a) 500 ml
- b) 600 ml
- c) 300 ml
- d) 800 ml

**Section C: Fill in the Blank Questions**

[Word Bank: mode, median, mean, range]

1. The \_\_\_\_\_ is the number that appears most often in a set of data.
2. The \_\_\_\_\_ is found by subtracting the smallest value from the largest value in a set of data.
3. The \_\_\_\_\_ is calculated by adding all values and dividing by the number of values.

**Section D: True/False Questions**

1. True or False: The graph of  $y = x^2$  is a straight line.
2. True or False: The sum of the angles in a triangle is 180 degrees.
3. True or False:  $\sqrt{49} = -7$ .

**Section E: Short Answer Questions**

1. Solve the equation  $3x - 7 = 11$ .
2. Expand and simplify  $(x + 4)(x - 2)$ .
3. Calculate the area of a circle with radius 5 cm. Give your answer in terms of  $\pi$ .