Functional Skills Maths Level 2

Mock Test 2

Total marks: 49

Pass mark: 29 out of 49

Time allowed: 1 hour 45 minutes

Section A: Non-calculator (14 marks) | Section B: Calculator (35 marks)

You will need: pen, pencil, ruler, rubber, calculator (Section B only)

Name: _____ Date: _____

Section A — Non-Calculator

8 questions • 14 marks

Question 1 (1 mark)

Write 47,000 in standard form.

- A) 4.7 × 10^4
- B) 47 × 10^3
- C) 4.7 × 10^3
- D) 4.7 × 10^5

Question 2 (2 marks)

Simplify: 5a − 3b + 2a + 7b − 4

- A) 7a + 4b − 4
- B) 7a − 4b − 4
- C) 3a + 4b − 4
- D) 7a + 10b − 4

Question 3 (2 marks)

A sofa costs £850 and is then increased by 15%. New price?

- A) £977.50
- B) £965
- C) £127.50
- D) £722.50

Question 4 (2 marks)

Work out: 2 1/3 − 5/6

- A) 1 1/2
- B) 1 2/3
- C) 2 1/6
- D) 1 5/6

Question 5 (2 marks)

Solve: 3(x + 5) = 27

- A) x = 4
- B) x = 7.3
- C) x = 12
- D) x = 6

Question 6 (1 mark)

What is 3^4?

- A) 12
- B) 64
- C) 81
- D) 27

Question 7 (2 marks)

A prize fund of £900 is split in the ratio 2:3:4. Largest share?

- A) £400
- B) £300
- C) £450
- D) £360

Question 8 (2 marks)

Estimate: (31.2 × 4.87) ÷ 0.52

- A) 30
- B) 300
- C) 150
- D) 3,000

Section B — Calculator

17 questions • 35 marks

Question 9 (2 marks)

£4,500 at 2.8% compound interest for 3 years. Final value?

- A) £4,878
- B) £4,887.43
- C) £4,626
- D) £4,890.12

Question 10 (2 marks)

Triangular garden base 6.4m, height 3.2m. Fertiliser £8.50/m². Total cost?

- A) £87.04
- B) £174.08
- C) £43.52
- D) £10.24

Question 11 (2 marks)

P(red) = 0.35. Spun 400 times. Expected number of reds?

- A) 140
- B) 35
- C) 175
- D) 260

Question 12 (2 marks)

Right-angled triangle with shorter sides 6cm and 8cm. Hypotenuse?

- A) 10 cm
- B) 14 cm
- C) 7 cm
- D) 100 cm

Question 13 (2 marks)

Frequency table: 40 (×3), 55 (×7), 60 (×5), 75 (×5). Mean?

- A) 57.5
- B) 59
- C) 60
- D) 55

Question 14 (2 marks)

Phone costs £552 after a 20% increase. Original price?

- A) £460
- B) £441.60
- C) £480
- D) £500

Question 15 (2 marks)

Map 1:50,000. 6.2 cm on map = ? km real.

- A) 3.1 km
- B) 31 km
- C) 0.31 km
- D) 310 km

Question 16 (2 marks)

Solve: $5x - 3 \geq 22$

- A) $x \geq 5$
- B) $x \geq 3.8$
- C) $x \leq 5$
- D) $x \geq 25$

Question 17 (2 marks)

Cylinder radius 3cm, height 15cm. Volume? ($V = \pi r^2 h$)

- A) 424.1 cm^3
- B) 141.4 cm^3
- C) 282.7 cm^3
- D) 1,272.3 cm^3

Question 18 (2 marks)

28 under-30s chose football out of 60 under-30s surveyed. Percentage?

- A) 46.7%
- B) 23.3%
- C) 36.7%
- D) 63.6%

Question 19 (2 marks)

(3.6 × 10^5) + (8.4 × 10^4) in standard form?

- A) 4.44 × 10^5
- B) 12 × 10^5
- C) 4.44 × 10^4

■ D) 44.4 × 10^4

Question 20 (3 marks)

Paint mixed yellow:blue = 3:2 for 15L. Yellow costs £6.80/L, blue £9.20/L. Total cost?

- A) £116.40
- B) £120
- C) £96
- D) £102

Question 21 (2 marks)

Tap fills 12.5 L/min. Time to fill 450L?

- A) 36 min
- B) 45 min
- C) 5,625 min
- D) 32 min

Question 22 (2 marks)

Expand and simplify: 4(2x − 1) + 3(x + 5)

- A) 11x + 11
- B) 11x + 4
- C) 5x + 11
- D) 11x − 11

Question 23 (3 marks)

Semi-circular window, diameter 1.8m. Glass costs £145/m². Total cost?

- A) £184.49
- B) £369.45
- C) £92.25
- D) £261

Question 24 (2 marks)

£1 = $1.26. A flight costs $945. Cost in £?

- A) £750
- B) £1,190.70
- C) £719.05
- D) £818.97

Question 25 (3 marks)

Gym membership: £34.99/month, £50 joining fee, 6 personal training sessions at £28 each. 10% off the monthly + joining if paying 12 months upfront. Total cost?

- A) £590.89
- B) £574.09
- C) £637.88
- D) £422.89