Functional Skills Maths Level 2

Mock Test 3

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 0.00062 in standard form.

- A) 6.2 × 10^-4
- B) 6.2 × 10^4
- C) 62 × 10^-5
- D) 6.2 × 10^-3

Question 2 (2 marks)

Simplify: 4m − 2n + 3m + 5n − m

- A) 6m + 3n
- B) 8m + 3n
- C) 6m − 3n
- D) 6m + 7n

Question 3 (2 marks)

Meal costs £64 plus a 12.5% service charge. Total?

- A) £72
- B) £76.50
- C) £56
- D) £8

Question 4 (2 marks)

Work out: 2/5 × 3/4

- A) 3/10
- B) 6/20
- C) 5/9
- D) 8/15

Question 5 (2 marks)

Solve: 5x + 3 = 2x + 18

- A) x = 5
- B) x = 3
- C) x = 7
- D) x = 15

Question 6 (1 mark)

Simplify: x^4 × x^3

- A) x^7
- B) x^12
- C) x
- D) 2x^7

Question 7 (2 marks)

Squash to water ratio = 1:5. Water needed for a 1.8L drink?

- A) 1.5 L
- B) 1.2 L
- C) 0.3 L
- D) 1.44 L

Question 8 (2 marks)

Estimate: (78.3 + 21.8) ÷ 5.12

- A) 10
- B) 20
- C) 200
- D) 2

Section B — Calculator

17 questions • 35 marks

Question 9 (2 marks)

£8,000 at 4.2% compound interest for 2 years. Final value?

- A) £8,686.11
- B) £8,672
- C) £8,336
- D) £8,700

Question 10 (2 marks)

Trapezium with parallel sides 5.6m and 8.4m, height 3m. Area?

- A) 21 m^2
- B) 42 m^2
- C) 14 m^2
- D) 25.2 m^2

Question 11 (2 marks)

Bag has 3 red, 5 blue, 2 green balls. P(blue) as a decimal?

- A) 0.5
- B) 0.3
- C) 0.05
- D) 0.2

Question 12 (2 marks)

A wire runs from the top of a 12m pole to a point on the ground 9m away from its base. Wire length?

- A) 15 m
- B) 21 m
- C) 7.9 m
- D) 225 m

Question 13 (2 marks)

Frequency: 0.5 (×8), 1.2 (×12), 2.5 (×6), 5.0 (×4). Mean weight (2dp)?

- A) 1.78 kg
- B) 2.3 kg
- C) 1.5 kg
- D) 2.05 kg

Question 14 (2 marks)

After a 15% pay rise, Kira earns £28,750. Original salary?

- A) £25,000
- B) £24,437.50
- C) £24,000
- D) £33,062.50

Question 15 (2 marks)

House plan scale 1:200. Room measures 3.5cm × 2.5cm on plan. Actual area?

- A) 35 m²
- B) 3.5 m²
- C) 175 m²
- D) 8.75 m²

Question 16 (2 marks)

Solve: 2(x + 4) > 14

- A) x > 3
- B) x > 5
- C) x > 7
- D) x > 11

Question 17 (2 marks)

Cylindrical tank diameter 1.2m, height 2m. Volume in litres?

- A) 2,262 L
- B) 4,524 L
- C) 7,540 L
- D) 1,131 L

Question 18 (2 marks)

32 out of 70 Year 11 students chose sandwich. Simplest fraction?

- A) 16/35
- B) 32/150
- C) 8/35
- D) 4/7

Question 19 (2 marks)

(4.5 × 10^7) − (2.8 × 10^6) in standard form?

- A) 4.22 × 10^7
- B) 1.7 × 10^7
- C) 4.22 × 10^6

■ D) 2.3 × 10^7

Question 20 (3 marks)

Trip costs £240/student for 15 students. 3 drop out and the cost is split among the remaining 12. Extra each?

■ A) £60
■ B) £40
■ C) £300
■ D) £80

Question 21 (2 marks)

Car depreciates 18% per year. Bought £15,000. Worth after 1 year?

■ A) £12,300
■ B) £2,700
■ C) £12,700
■ D) £17,700

Question 22 (2 marks)

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

■ A) −3x + 17
■ B) 13x + 17
■ C) −3x + 13
■ D) 3x + 17

Question 23 (3 marks)

Running track: 2 straights of 100m + 2 semicircles of diameter 60m. Total lap length?

■ A) 388 m
■ B) 320 m
■ C) 489 m
■ D) 200 m

Question 24 (2 marks)

£1 = €1.14. Apartment €684/week for 2 weeks. Cost in £?

■ A) £1,200
■ B) £600
■ C) £1,559.52
■ D) £1,368

Question 25 (3 marks)

Phone tariff: £18.50/month, 8p/min after 500 free, 4p/text after 200 free, £3.50/GB over 5GB. Used 575 min, 250 texts, 7GB. Bill?

■ A) £33.50
■ B) £26.50
■ C) £44
■ D) £15