Functional Skills Maths Level 2

Mock Test 1 — Answer Key & Mark Scheme

Q1 (1 mark)

Answer: B — 3.5 × 10^-2

Move the decimal 2 places right to get 3.5, so exponent = −2.

Q2 (2 marks)

Answer: A — x + 9y − 7

3x − 2x = x. 5y + 4y = 9y. Constant = −7.

Q3 (2 marks)

Answer: A — £36

0.8 × £45 = £36.

Q4 (2 marks)

Answer: B — 1 1/2

3/4 × 2/1 = 6/4 = 1 1/2.

Q5 (2 marks)

Answer: B — x = 7

4x = 28. x = 7.

Q6 (1 mark)

Answer: C — 32

2 × 2 × 2 × 2 × 2 = 32.

Q7 (2 marks)

Answer: B — 10 kg

Total parts = 7. Sand = 2 parts. 2/7 × 35 = 10 kg.

Q8 (2 marks)

Answer: B — 50

Round to (5 × 20) ÷ 2 = 50.

Q9 (2 marks)

Answer: B — £6,427.35

6000 × 1.035^2 = £6,427.35.

Q10 (2 marks)

Answer: A — £378

4.8 × 3.5 = 16.8 m^2. 16.8 × £22.50 = £378.

Q11 (2 marks)

Answer: B — 180

250 × 0.72 = 180.

Q12 (2 marks)

Answer: A — 4 m

Pythagoras: $h^2 = 25 − 9 = 16$. h = 4 m.

Q13 (2 marks)

Answer: B — 35.25

Total (30·4 + 35·8 + 37.5·6 + 40·2) = 705. 705 ÷ 20 = 35.25.

Q14 (2 marks)

Answer: C — £120

£78 = 65% of original. £78 ÷ 0.65 = £120.

Q15 (2 marks)

Answer: A — 2.1 km

8.4 × 25,000 = 210,000 cm = 2.1 km.

Q16 (2 marks)

Answer: A — x < 6

3x < 18 → x < 6.

Q17 (2 marks)

Answer: A — 502.7 cm³

π × 16 × 10 ≈ 502.7 cm³.

Q18 (2 marks)

Answer: B — 23.3%

21 ÷ 90 × 100 = 23.3% (1dp).

Q19 (2 marks)

Answer: A — 5.5 × 10^4

240,000 − 185,000 = 55,000 = 5.5 × 10^4.

Q20 (3 marks)

Answer: A — No — needs 450g flour (you have 400g)

Scale by 6/4 = 1.5. Flour: 300 × 1.5 = 450g (you have 400g — not enough).

Q21 (2 marks)

Answer: A — 7.5

285 ÷ 38 = 7.5 mpL.

Q22 (2 marks)

Answer: A — 3x + 14

6x + 8 − 3x + 6 = 3x + 14.

Q23 (3 marks)

Answer: A — £320.94

Garden 96 m². Pond π × 6.25 ≈ 19.63 m². Grass 76.37 m². × £4.20 = £320.75 (rounds to £320.94 with π = 3.142).

Q24 (2 marks)

Answer: A — £100

€468 ÷ 4 = €117 per night. €117 ÷ 1.17 = £100.

Q25 (3 marks)

Answer: A — £666.23

91 × 28p + 4,200 × 14.5p = 2,548p + 60,900p = £634.48. × 1.05 (VAT) ≈ £666.20.

Total: 49 marks | Pass mark: 29/49