Functional Skills Maths Level 2

Mock Test 5 — Answer Key & Mark Scheme

Q1 (1 mark)

Answer: A — 5,040

5.04 × 1000 = 5,040.

Q2 (2 marks)

Answer: A — 3(2x + 5)

HCF = 3. 3(2x + 5).

Q3 (2 marks)

Answer: A — £66.50

£95 × 0.7 = £66.50.

Q4 (2 marks)

Answer: A — 2 1/2

5/8 × 4/1 = 20/8 = 2 1/2.

Q5 (2 marks)

Answer: A — x = 4

6x − 2 = 4x + 6 → 2x = 8 → x = 4.

Q6 (1 mark)

Answer: A — 1

Any non-zero number to the power 0 = 1.

Q7 (2 marks)

Answer: A — £72

1 part = £120 ÷ 5 = £24. Smaller = 3 × £24 = £72.

Q8 (2 marks)

Answer: A — 100

(200 × 5) ÷ 10 = 1000 ÷ 10 = 100.

Q9 (2 marks)

Answer: A — £13,939

18,000 × 0.88^2 = £13,939 (nearest £).

Q10 (2 marks)

Answer: A — £1,050

Area = 30 m^2. × £35 = £1,050.

Q11 (2 marks)

Answer: A — 32

P(tails) = 0.4. 80 × 0.4 = 32.

Q12 (2 marks)

Answer: A — 170.0 m

$150^2 + 80^2 = 22,500 + 6,400 = 28,900$. $\sqrt{28,900} = 170$ m.

Q13 (2 marks)

Answer: A — 6°C

16 − 10 = 6°C.

Q14 (2 marks)

Answer: A — £140

£84 ÷ 0.6 = £140.

Q15 (2 marks)

Answer: A — 4.8 km

12 × 40,000 = 480,000 cm = 4.8 km.

Q16 (2 marks)

Answer: A — −1, 0, 1, 2, 3

n > −2 (excludes −2) and n ≤ 3 (includes 3).

Q17 (2 marks)

Answer: A — 527.8 cm³

1/3 × π × 36 × 14 = 527.8 cm³.

Q18 (2 marks)

Answer: A — 16%

16/100 = 16%.

Q19 (2 marks)

Answer: A — 3.8 × 10^-7

9.5 × 4 = 38. 10^-13 × 10^5 = 10^-8. 38 × 10^-8 = 3.8 × 10^-7.

Q20 (3 marks)

Answer: A — 800

Let s = standard. 45s + 72(1200−s) = 64,800 → 45s + 86,400 − 72s = 64,800 → −27s = −21,600 → s = 800.

Q21 (2 marks)

Answer: A — 63.75 mph

5h 20min = 16/3 hours. 340 ÷ (16/3) = 63.75 mph.

Q22 (2 marks)

Answer: A — $2x^2 − 7x − 4$

$2x^2 − 8x + x − 4 = 2x^2 − 7x − 4$.

Q23 (3 marks)

Answer: A — 89.6 L

80 × 35 × 32 = 89,600 cm³ = 89.6 L.

Q24 (2 marks)

Answer: A — £450

684 ÷ 1.52 = £450.

Q25 (3 marks)

Answer: A — £1,400

Materials = 0.15 × 9000 = £1,350. Total costs = 1200 + 4800 + 1350 + 250 = £7,600. Profit = £9,000 − £7,600 = £1,400.

Total: 49 marks | Pass mark: 29/49