2.34 Speed Drills: Percentages and Proportion: Test Pack

Total Marks

GL ASSESSMENT EP.M33 · Calculators not allowed · about 15 minutes

Name: _____ Date: ____ / ____ / _____

A timed speed-drill pack for building fast, accurate percentages and proportion skills - the mental fluency that keeps working quick enough for the real GL Assessment 11+ maths paper. Complete each block against its own 5-minute target without a calculator, writing only the final answer in the answer grid provided; no working space is given or needed. There are 4 blocks of 20 one-mark, answer-only questions: Block 1, percentage of an amount built from the 50%, 25%, 10%, 5% and 1% building blocks; Block 2, percentage increase and decrease, including reverse percentage problems; Block 3, sharing amounts in a ratio and simplifying ratios; Block 4, a mixed block of direct and inverse proportion against the clock. Each block carries its own Target: 5 minutes heading; time yourself (or ask an adult to time you) and note how close you get to the target on each block.

1 Block 1: Percentage of an amount (building blocks) - Target: 5 minutes. Work out 10% of 40.

(1)

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2 Work out 45% of 120.

(1)

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3 Work out 85% of 60.

(1)

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4 Decrease 80 by 25%.

(1)

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5 Increase £60 by 20%.

(1)

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6 A book costs £16. Its price increases by 25%. Find the new price.

(1)

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7 Find the new value when 60 is decreased by 15%.

(1)

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8 A charity's fundraising total is reduced by 15% after refunds, leaving £68. Find the original total before refunds.

(1)

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9 Simplify the ratio 14 : 21 to its simplest form.

(1)

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10 Complete the missing number: 5 : 6 = ___ : 42

(1)

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11 A model plane kit lists wingspan to fuselage length in the ratio 18 : 4. Simplify this ratio.

(1)

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12 Share £130 between two charities in the ratio 3 : 10. Find how much more the larger charity receives than the smaller.

(1)

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13 A sum of money is shared between Priya and Tomasz in the ratio 3 : 8. Tomasz receives £75 more than Priya. Find Priya's share.

(1)

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14 Petrol costs £1.40 per litre. Find the cost of 15 litres.

(1)

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15 A narrowboat cruises along a canal at a constant speed of 4 mph. Find how far it travels in 5 hours.

(1)

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16 A map has a scale of 1 cm to 5 km. Find the real distance for a map length of 8 cm.

(1)

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Mark scheme · 2.34 Speed Drills: Percentages and Proportion: Test Pack

Question 1

4 cao **B1**

Answer: 4

Question 2

54 cao **B1**

Answer: 54

Question 3

51 cao **B1**

Answer: 51

Question 4

60 cao **B1**

Answer: 60

Question 5

£72.00 cao **B1**

Answer: £72.00

Question 6

£20.00 cao **B1**

Answer: £20.00

Question 7

51 cao **B1**

Answer: 51

Question 8

£80 cao **B1**

Answer: £80

Question 9

2 : 3 oe cao **B1**

Answer: 2 : 3

Question 10

35 cao **B1**

Answer: 35

Question 11

9 : 2 oe cao **B1**

Answer: 9 : 2

Question 12

£70 cao **B1**

Answer: £70

Question 13

£45 cao **B1**

Answer: £45

Question 14

£21.00 cao **B1**

Answer: £21.00

Question 15

20 miles cao **B1**

Answer: 20 miles

Question 16

40 km cao **B1**

Answer: 40 km

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