



THIRD SPACE
LEARNING

Mathematics

Paper 1

(Non-Calculator)

Foundation Tier

Mark Scheme

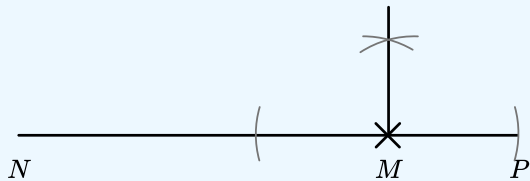
AQA GCSE

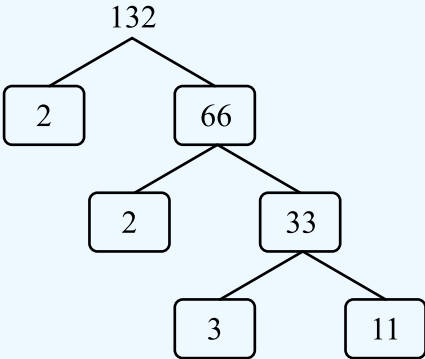
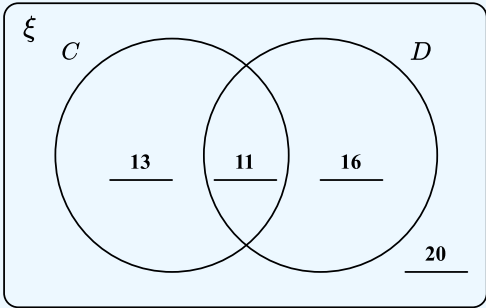
SET 4


Question	Working	Answer	Notes
Q1		3.1	A1 cao
Q2		600	A1 cao
Q3		25	A1 cao
Q4		$\frac{21}{50}$	A1 cao
Q5		$9p$	A1 cao
Q6		No – not all of the sides are equal	B1 Correct explanation
Q7a		8	A1 cao
Q7b	May = 14 days, July = 8 days $14 - 8 = 6$ more days	6	M1 8 or 14 seen A1 cao
Q8a		$n = 13$	A1 cao
Q8b		$m = 25$	A1 cao
Q9	$3 \times 25p = 75p = \text{£}0.75$ $\text{£}1.80 + \text{£}0.90 + \text{£}0.75 = \text{£}3.45$ $\text{£}5 - \text{£}3.45 = \text{£}1.55$	£1.55	M1 $75p$ oe seen M1 $\text{£}1.80 + \text{£}0.90 + \text{£}0.75 = \text{£}3.45$ A1 cao
Q10a	$21 - 30 = -9$	-9	A1 cao
Q10b		>	A1 cao

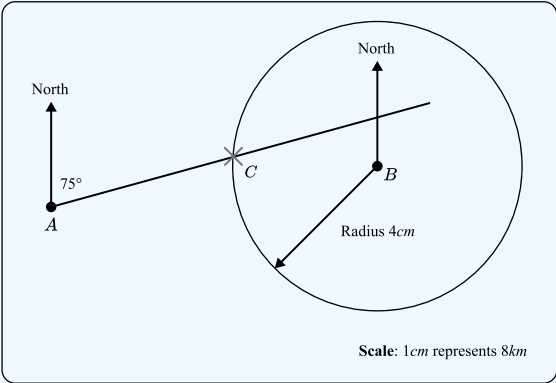
Question	Working	Answer	Notes
Q11	$\frac{4}{5}$ of 250 = 200 $250 - 200 - 2 = 48$ 48 in ratio 3:1 $48 \div 4 = 12$, $12 \times 3 = 36$ chickens	36	M1 $\frac{4}{5}$ of 250 = 200 M1 $250 - 200 - 2 = 48$ or $48 \div 4 = 12$ A1 cao
Q12a		9	A1 cao
Q12b	2, 3, 5, 6, 9, 9, 11	6	M1 Correctly orders numbers A1 cao
Q13a		$\frac{4}{31}$	A1 cao
Q13b	10% of 31 = 3.1 Or 4 = 10% of 40	More than 10%	B1 More than 10% A1 Correct working to support conclusion
Q14	$15 + 10 \times 4 = 15 + 40 = 55$	55	M1 Substitutes 4 correctly A1 cao
Q15	$37 \times 24 = 888$	88.8	M1 Valid attempt at a written method A1 cao
Q16a	$7.5 \times 2 = 15$	15 km/h	M1 7.5×2 or $7.5 \div 0.5$ A1 cao

Question	Working	Answer	Notes
Q16b		Priya was faster in the first part of her journey as the line is steeper than in the second part of her journey	B1 Faster in the first part oe B1 Correct explanation
Q17	48 in the ratio 3:4:5 $3 + 4 + 5 = 12$ $48 \div 12 = 4$ $3 \times 4 = 12 \text{ cm}$	12cm	M1 $3 + 4 + 5 (= 12)$ or $48 \div 12 (= 4)$ oe M1 $3 \times 4 (= 12)$ A1 12cm
Q18a	$\frac{40 + 8}{2} = 24$ $\frac{24 + 8}{2} = 16$	16	M1 24 seen A1 cao
Q18b	$p = 28 - 18 = 10$ $q = 18 + 28 = 46$ $r = 28 + 46 = 74$	$p = 10$ $q = 46$ $r = 74$	A1 Two of $p = 10$ or $q = 46$ or $r = 74$ A1 All three correct
Q19	$5\frac{1}{3} - 2\frac{1}{2} = \frac{16}{3} - \frac{5}{2}$ $= \frac{32}{6} - \frac{15}{6}$ $= \frac{17}{6} = 2\frac{5}{6}$	$2\frac{5}{6}$	M1 $5\frac{1}{3} - 2\frac{1}{2}$ M1 Converts to improper fractions M1 Use of common denominator and subtracts numerators A1 cao

Question	Working	Answer	Notes
Q20a	$9.30\text{am} - 12.15\text{pm} = 2 \text{ hours } 45 \text{ minutes}$ $1\text{pm} - 5.30\text{pm} = 4 \text{ hours } 30 \text{ minutes}$ Total = 7 hours 15 minutes	7 hours 15 minutes	A1 cao
Q20b	$7 \times 16 = \pounds 112$ $16 \div 4 = \pounds 4$ $\pounds 112 + \pounds 4 = \pounds 116 \text{ per day}$ $\pounds 116 \times 5 = \pounds 580 \text{ per week}$ Or 7 hours 15 minutes per day 36 hours 15 minutes per week $36 \times 16 = \pounds 576$ $16 \div 4 = \pounds 4$ $\pounds 576 + \pounds 4 = \pounds 580$	$\pounds 580$	M1 Pay per day = $\pounds 116$ or hours per week = 36 hours 15 minutes M1 Attempt at $\pounds 116 \times 5$ or $36.25 \times \pounds 16$ A1 cao
Q21			M1 Arc on line NP , same distance from M as P or two points equal distance from M on line NP marked M1 Fully correct with all construction lines shown

Question	Working	Answer	Notes
Q22		$2^2 \times 3 \times 11$	M1 Correctly identifies at least 2 prime factors A1 cao
Q23	$5 \times 5 = 25$ $210 - 2 \times 25 = 160$ $160 \div 4 = 40$ $40 \div 5 = 8$ The length of the cuboid is $8cm$ $5 \times 5 \times 8 = 200cm^3$	$200cm^3$	M1 $210 - 2 \times 25 = 160$ M1dep their ' 160 ' $\div 4 = 40$ M1 Length of cuboid = $8cm$ M1 $5 \times 5 \times 8 (= 200)$ A1 Cao
Q24a	$\frac{1}{3}$ of $60 = 20$ $20 + 27 + 24 = 71$ $71 - 60 = 11$ 		M1 20 correctly placed M1 11 in intersection A1 Fully correct diagram

Question	Working	Answer	Notes
Q24b	$3.65 \times 10 = 365000$ $36.5 \times 10 = 0.365$	$\frac{11}{60}$	M1 $\frac{\text{their '11'}}{60}$ A1 cao
Q25a		Positive correlation	B1
Q25b		31000 miles	M1 Reasonable line of best fit A1 [2900 – 33000] miles
Q26a	$p - 3 < \frac{p + 6}{3}$ $3p - 9 < p + 6$ $2p < 15$ $p < 7.5$	$p < 7.5$	M1 Reaches $3p - 9 < p + 6$ oe M1 Isolates term in p A1 cao
Q26b		$(x + 8)(x - 5)$	M1 $(x \pm 8)(x \pm 5)$ A1 $(x + 8)(x - 5)$

Question	Working	Answer	Notes
Q27		8:10	A1 cao
Q28		$\frac{1}{2}$	A1 cao
Q29		See diagram	M1 Bearing of 075° from A M1 Circle or arc, radius 4cm A1 Point between A and B correctly marked C
Q30a	$3x + 20 + 2x + 10 = 180$ $5x + 30 = 180$ $5x = 150$ $x = 30$	$x = 30$	M1 Forms equation $3x + 20 + 2x + 10 = 180$ oe M1 Isolates term/terms in x A1 cao
Q30b	Similar triangles – scale factor 4 $CE = 4y$	$4y$	M1 scale factor 4 A1 cao

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