1MA0_2F					
Question		**Working**	**Answer**	**Mark**	**Notes**
1	(a)		3600	1	B1 for 3600
	(b)		1.8	1	B1 for 1.8
	(c)		3.6 shown	1	B1 for 3.6 marked on number line
2	(a)	<table><tr><td>Fruit</td><td>Tally</td><td>Freq</td></tr><tr><td>Currant</td><td>𝍸</td><td>5</td></tr><tr><td>Prune</td><td>𝍸</td><td>5</td></tr><tr><td>Raisin</td><td>𝍸 |</td><td>6</td></tr><tr><td>Sultana</td><td>𝍸 |||</td><td>8</td></tr></table>	Correct tally	2	M1 for at least 2 tallies or frequencies correct A1 for 4 correct frequencies

1MA0_2F					
Question		**Working**	**Answer**	**Mark**	**Notes**
2	(b)	Angles: Currants (75°) Prunes (75°) Raisins (90°) Sultanas (120°)	Diagram drawn	3	M1 for bar chart or other suitable chart with at least 2 correct heights for their scale or ft from (a) M1 for all bars correctly labelled and vertical axis correctly scaled A1 for fully correct bar chart or ft from (a) OR M1 for pictogram, at least 2 correct rows or ft from (a) M1 for correct labels on all rows and key A1 for fully correct pictogram or ft from (a) OR M1 for stick graph with at least 2 sticks of correct height for their scale or ft from (a) M1 for all sticks correctly labelled and vertical axis correctly scaled A1 for fully correct stick graph or ft from (a) OR M1 for pie chart with at least 2 correct sectors (±2°) or 2 angles correctly calculated or ft from (a) M1(dep) for all sectors correctly labelled A1 for fully correct pie chart or ft from (a)

1MA0_2F					
Question		**Working**	**Answer**	**Mark**	**Notes**
3	(a)		16 or 4	1	B1 for 4 or 16 (or both)
	(b)		21	1	B1 cao
	(c)		10 or 15	1	B1 10 or 15 (or both)
4	(a)		32 and 10	2	B1 for 32 in the correct place B1 for 10 in the correct place
	(b)	$10\times3\times2=60$ or $10\times3+30=60$	$\times2$ or $+30$	1	B1 for $\times2$ or $+30$
5		$180\times\frac{10}{100}=18$ or $\frac{20}{180}\times100=11.\dot{1}$	No	3	M1 for $180\times\frac{10}{100}$ oe or 180×1.1 oe or $\frac{20}{180}\times100\ \left(=11.\dot{1}\right)$ oe A1 for (£)18 or (£)198 or 11% C1 (dep M1) for comparison of increases or total pay or percentage increases leading to a correct deduction

1MA0_2F					
Question		**Working**	**Answer**	**Mark**	**Notes**
6	(a)		No + reason	1	B1 for No because she has 1 choice out of 3 which is the same as Mike oe
	(b)	(r,g)(r,b)(g,b)(g,r)(b,g)(b,r) (r,r)(b,b)(g,g)	Complete list	2	M1 for listing pairs (at least 5 correct pairs) A1 for fully correct list (ignore repeats)
	(c)		$\frac{1}{9}$	1	B1 for $\frac{1}{9}$ oe (If M1A0 in (b), then SC B1 in (c) for $\frac{\text{their number of (b,g)}}{\text{their total number of outcomes}}$)
7	(a)	3 4 4 5 5 6 8 9 10	5	2	M1 for ordering the 9 numbers A1 cao
	(b)	(4 + 8 + 5 + 9 + 10 + 5 + 6 + 3 + 4)÷9 54 ÷ 9	6	2	M1 for (4 + 8 + 5 + 9 + 10 + 5 + 6 + 3 + 4) ÷ 9 or 54 ÷ 9 A1 cao
8	(a)		10	1	B1 cao
	(b)		6	1	B1 cao
	(c)		Correct image	2	B2 cao (B1 for reflection in a line parallel to the given line)
9		20 × 20 × 40 = 16000	16000 cm^3	3	M1 for 20 × 20 × 40 or 0.2 × 0.2 ×0.4 A1 for for 16 000 or 0.016 B1 for cm^3 or m^3 (consistent with working)

1MA0_2F					
Question		**Working**	**Answer**	**Mark**	**Notes**
10	(a)	30 + 8×4	62	2	M1 for 30 + 8×4 or attempt to add four 8s to 30 (allow one error in addition) A1 cao
	(b)	110 – 30 = 80 80÷8 = 10 **OR** 110 – 62 = 48 48÷8 = 6 4 + 6 = 10	10	3	M1 for 110 – 30 (=80) M1 (dep) for '80' ÷ 8 or A1 cao OR M1 for 110 – 62 (= 48) M1(dep) for '48'÷8 = 6 A1 cao
11	(a)		cm gallons	2	B1 for centimetres or cm or millimetres or mm B1 for gallons (accept pints)
	(b)(i)		4000	2	B1 cao
	(ii)		3.5		B1 for 3.5 oe
12		3 ×9.58 + 12.61 + 7.06 + 4.41 (= 52.82)	Yes + working	4	M2 for 3 ×9.58 (=28.74) + 12.61 + 7.06 + 4.41 or 55 − 3 ×9.58 (=28.74) − 12.61 −7.06 − 4.41 (M1 for at least 2 correct costs seen) A1 for 52.82 or 2.18 C1 (dep M1) for comparison and correct deduction using their total cost or amount left

1MA0_2F					
Question		**Working**	**Answer**	**Mark**	**Notes**
13	(a)		A and C	1	B1 for A and C (no extras)
	(b)		B or E	1	B1 for B or E (or both) (no extras)
	(c)		2	1	B1 cao
14		$3 \times 4 = 12$ $12\ m^2 = 120000\ cm^2$ $20 \times 20 = 400$ $120000 \div 400 = 300$ $300 \div 10 = 30$ **OR** 3m = 300cm, 4 m = 400cm $300 \div 20 = 15$, $400 \div 20 = 20$ $15 \times 20 = 300$ $300 \div 10 = 30$ $30 \times 34.99 = 1049.70$	No with working	6	B1 for a correct conversion of 3 m or 4 m to cm or 20 cm to m or a correct and appropriate area conversion. M1 for 300×400 (=120000) or 3×4 (=12) M1 for 20×20 or 0.20×0.20 M1 for '120000'÷ '400' or '12' ÷ '0.04' A1 for 1049.7(0) C1 (dep M1) for comparison and correct deduction using their total cost with supportive working OR B1 for a correct conversion of 3 m or 4 m to cm or 20 cm to m or a correct and appropriate area conversion. M1 for 300 ÷ 20 or 400 ÷ 20 or 3 ÷ 0.2(0) or 4 ÷0 2(0) M1 for 300 ÷ 20 and 400 ÷ 20 or 3 ÷ 0.2(0) and 4 ÷0 2(0) M1 for '15' × '20' A1 for 1049.7(0) C1 (dep M1) for comparison and correct deduction using their total cost with supportive working

1MA0_2F					
Question		**Working**	**Answer**	**Mark**	**Notes**
15	(a)		Correct net	1	B1 for correct net
	(b)	Shade two faces. For each correct net there are 3 different possibilities	Correct shading	1	B1 for shading 2 opposite faces
	(c)		12	1	B1 cao
16		Paint R Us 6×2.19 (= 13.14) Deco Mart 9×1.80 (= 16.20) 16.20×0.9 (= 14.58)	Paint R Us	6	Paint R Us M1 for '$9 - 3$' $\times$ 2.19 A1 for 13.14 Deco Mart M2 for $\frac{90}{100}$ $\times$ '16.20' oe (M1 for $\frac{10}{100}$ $\times$ '16.20' oe) A1 for 14.58 C1 (dep M1) for comparison of cost of 9 tins at Paint R Us with cost of 9 tins at Deco Mart leading to a correct deduction

1MA0_2F					
Question		**Working**	**Answer**	**Mark**	**Notes**
17		<table><tr><th>Bird</th><th>Frequency</th><th>Angles</th></tr><tr><td>Magpie</td><td>15</td><td>75</td></tr><tr><td>Thrush</td><td>10</td><td>50</td></tr><tr><td>Starling</td><td>20</td><td>100</td></tr><tr><td>Sparrow</td><td>27</td><td>135</td></tr></table> Angles $\frac{15}{72}\times 360$, $\frac{10}{72}\times 360$, $\frac{20}{72}\times 360$, $\frac{27}{72}\times 360$ **OR** $\frac{75}{15}\times 10$, $\frac{75}{15}\times 20$, $\frac{75}{15}\times 27$	Correct pie chart	3	M1 for any one of $\frac{15}{'72'}\times 360$, $\frac{10}{'72'}\times 360$, $\frac{20}{'72'}\times 360$, $\frac{27}{'72'}\times 360$ oe ('72' must clearly come from adding frequencies) A1 for 75 seen from correct working or 50 seen **or** 100 seen **or** 135 seen **or** one sector of angle 50^o or 100^o or 135^o labelled correctly with bird's name **or** all sectors correctly drawn A1 for correct pie chart fully labelled with birds' names OR M1 for $\frac{'75'}{15}\times 10$ **or** $\frac{'75'}{15}\times 20$ **or** $\frac{'75'}{15}\times 27$ ('75' must be in the range 73 - 77) A1 for 50 seen **or** 100 seen **or** 135 seen **or** one sector of angle 50^o or 100^o or 135^o labelled correctly with bird's name **or** all sectors correctly drawn A1 for correct pie chart fully labelled with birds' names NB. Allow a tolerance of $\pm 2^o$ on all drawn angles

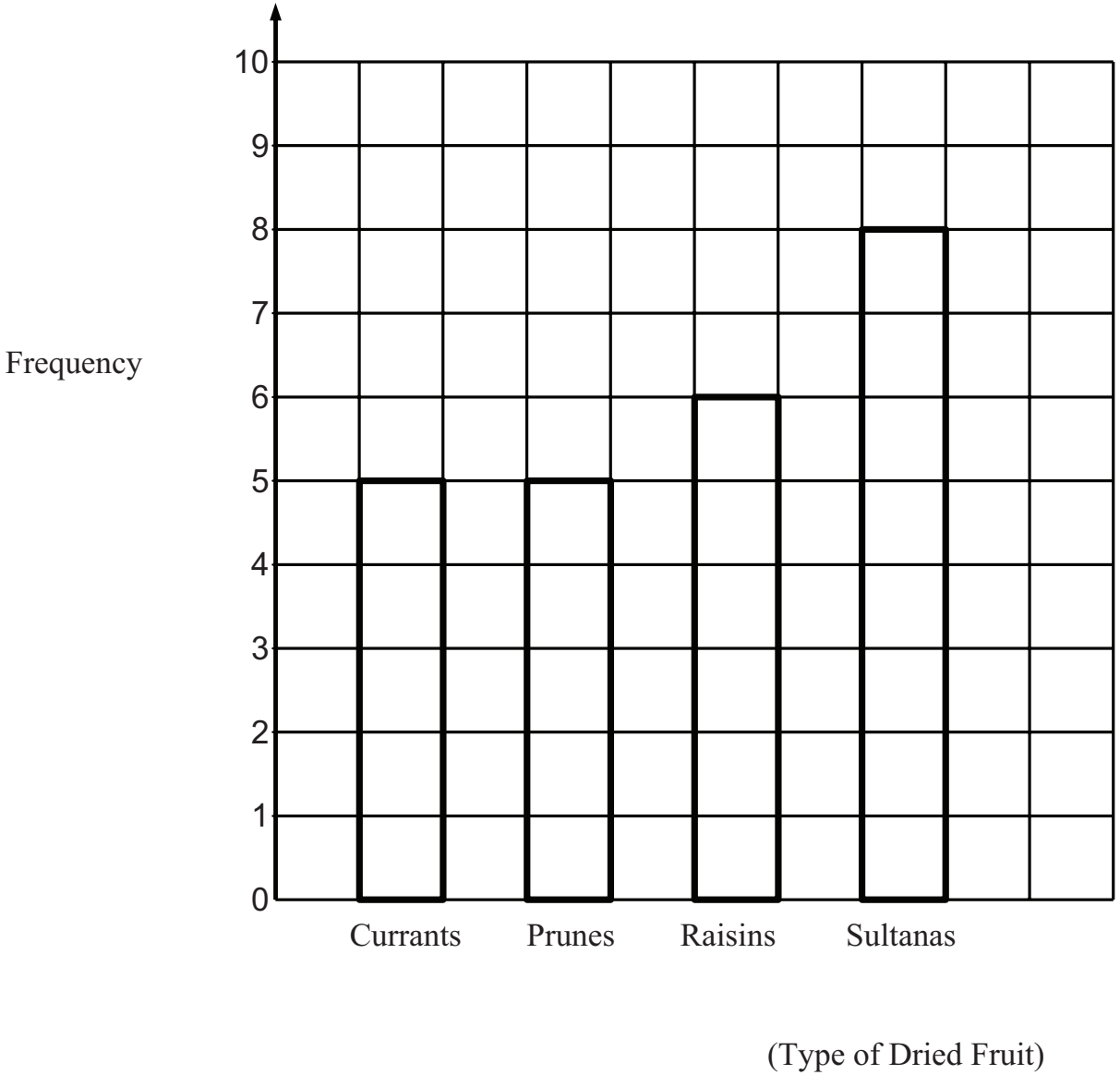
1MA0_2F					
Question		**Working**	**Answer**	**Mark**	**Notes**
18	(a)	$y = 4 \times 7.5 + 5.4$	35.4	2	M1 for $4 \times 7.5 + 5.4$ A1 cao
	(b)	$18.8 = 4x - 2.4$ $x = \frac{18.8 + 2.4}{4}$	5.3	2	M1 for intention to add 2.4 to 18.8 or to subtract -2.4 from 18.8 or to divide 18.8 and (-)2.4 by 4 A1 cao
19		180÷30 = 6 9 + 6 + 0.5+0.5 = 16	16:00 or 4pm	3	M1 for 180÷30 (= 6) or 30 + 30 +…to a total of between 150 and 210 exclusive M1 for 9 + '6' + 0.5 + 0.5 A1 for 16:00 or 4pm (accept 4 o'clock) OR M1 for 60 bricks used or 120 bricks left at 11 am M1 for 45 bricks used between 11 30 am and 1 pm or 75 bricks left at 1 pm A1 for 16:00 or 4pm (accept 4 o'clock) (SC B1 for 3 pm or 3 30pm if M0 scored) (SC B1 for 7 hours needed if M0 scored)
20		$\frac{\sqrt{20.4}}{6.2 \times 0.48} = \frac{4.5166359}{2.976}$	1.5176(868)	2	B2 for 1.5176… (B1 for sight of 4.51(66359..) **or** 4.52 **or** 2.976 **or** 2.98 **or** 1.51 **or** 1.52 **or** 1.518 **or** or 1.517 **or** 1.5177 **or** $\frac{\sqrt{510}}{5}$)

1MA0_2F					
Question		**Working**	**Answer**	**Mark**	**Notes**
21	(a)		56	1	B1 for 56 (accept answer in the range 55 to 57)
	(b)	Barry's Bricks £50 Bricks ArUs £65 65 − 50	15	3	M1 for 50 or 65 (accept 64 – 66) M1 for 65 – 50 (accept 64-66 for 65) A1 for 15 (accept answer in range 14 to 16)
22	(a)	1 – 0.7	0.3	2	M1 for 1 – 0.7 A1 for 0.3 oe
	(b)	200 ×0.7	140	2	M1 for 200 ×0.7 A1 for 140
23		25 ÷ 50 = 0.5 h = 30 min 25 ÷ 60 = 0.416 h = 25 min	5	3	M1 for 25 ÷ 50 **or** $\frac{60}{50}\times 25$ **or** 30 (min) **or** 0.5(h) **or** 25 ÷ 60 **or** $\frac{60}{60}\times 25$ **or** 25 (min) **or** 0.41(6)(h) M1(dep) '0.5' –'0.41(6)'**or** '30' – '25' A1 cao OR M1 for 60 ÷ 25 (= 2.4) and 60 ÷ "2.4" **or** 50 ÷ 25 (= 2) and 60 ÷ "2" M1(dep) for '30' – '25' A1 cao

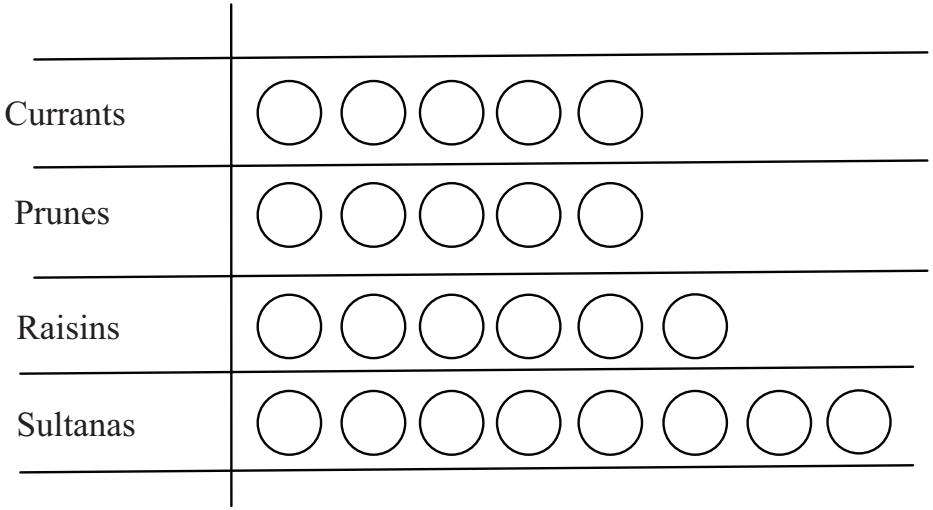
1MA0_2F					
Question		**Working**	**Answer**	**Mark**	**Notes**
24		Angle DEC = 180 – 41 =139 Angles on a straight line sum to 180^o Angle EDC = 60 – 38 **or** Angle ABD = 180 – 120 – 38 (=22) Co-interior/Allied angles of parallel lines sum to 180^o **or** Angles in a triangle sum to 180^o **and** Alternate angles x =)180 – '139' – '22' (=19) Angles in a triangle sum to 180^o **OR** Angle ADC = 180^o – 120^o = 60^o Co-interior/Allied angles of parallel lines sum to 180^o Angle EDC = 22^o Angle ECD = 41^o – 22^o = 19^o Exterior angle of triangle equals sum of the two opposite interior angles **OR** Angle DBC = 38^o Alternate angles Angle BCE = 101^o Angle sum of a triangle is 180^o Angle BCD = 120^o Opposite angles of a parallelogram are equal Angle ECD = 120^o – 101^o = 19^o	x = 19^o and reasons	4	M1 for DBC = 38^o **or** ADC = 60^o(can be implied by BDC = 22^o) **or** ABC = 60^o **or** DCB = 120^o **or** (ABD =) 180 – 120 –38 (=22) M1 for (BDC =) 60 − 38 (=22) **or** BDC = '22' **or** (DEC =) 180 − 41 (=139) **or** (BCE =) 180 −41 − 38 (=101) M1 (dep on both previous M1) for complete correct method to find x **or** (x =) 19 C1 for x = 19^o **AND** Co-interior/allied angles of parallel lines sum to 180^o **or** Opposite angles of a parallelogram are equal **or** Alternate angles **AND** Angles on a straight line sum to 180^o **or** Angles in a triangle sum to 180^o **or** Exterior angle of triangle equals sum of the two opposite interior angles **or** Angles in a quadrilateral sum to 360^o

1MA0_2F					
Question		**Working**	**Answer**	**Mark**	**Notes**
25	(a)		–1, 0, 1, 2, 3	2	B2 for all 5 correct values; ignore repeats, any order (B1 for 4 correct (and no incorrect values) eg. 0, 1, 2, 3 **or** one additional value, eg –1, 0, 1, 2, 3, 4)
	(b)		$-4 < x \leq 3$	2	B2 for $-4 < x \leq 3$ **or** > -4 **and** ≤ 3 (B1 for $-4 < x$ **or** $x > -4$ **or** $x \leq 3$ **or** $3 \geq x$ **or** > -4 **or** ≤ 3 **or** $-4 \leq x < 3$) (NB Accept the use of any letter)
	(c)	$3y - 2 > 5$ $3y > 7$	$y > \frac{7}{3}$	2	M1 for clear intention to add 2 to both sides (of inequality or equation) or clear intention to divide all terms by 3 **or** $3y > 7$ **or** $3y < 7$ **or** $3y = 7$ A1 $y > \frac{7}{3}$ **or** $y > 2\frac{1}{3}$ **or** $y > 2.\dot{3}$ NB. final answer **must** be an inequality (SC B1 for $\frac{7}{3}$ oe seen if M0 scored)
26	(a)		$2(2x + 5y)$	1	B1 cao
	(b)		$x(x + 7)$	1	B1 cao
27		Triangle at (–2, 2), (–2, 0),(–1,–1)	Correct figure	2	M1 for any translation A1 for correct translation

2

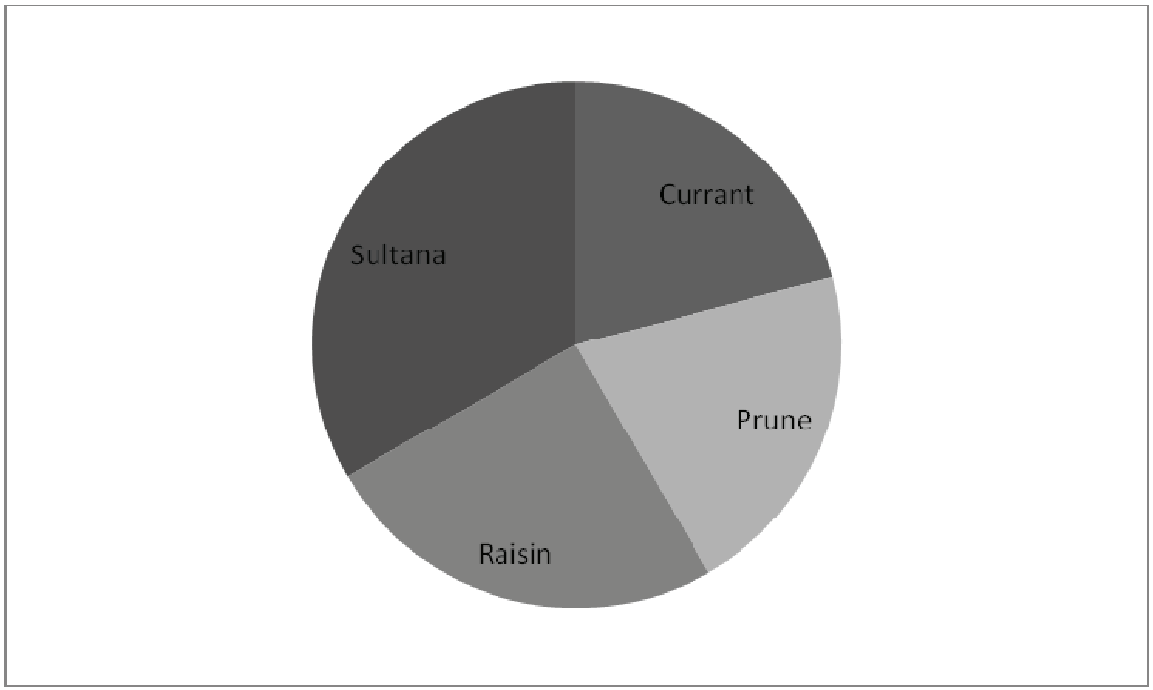

Frequency
10
9
8
7
6
5
4
3
2
1
0
Currants
Prunes
Raisins
Sultanas
(Type of Dried Fruit)

2 (alt)

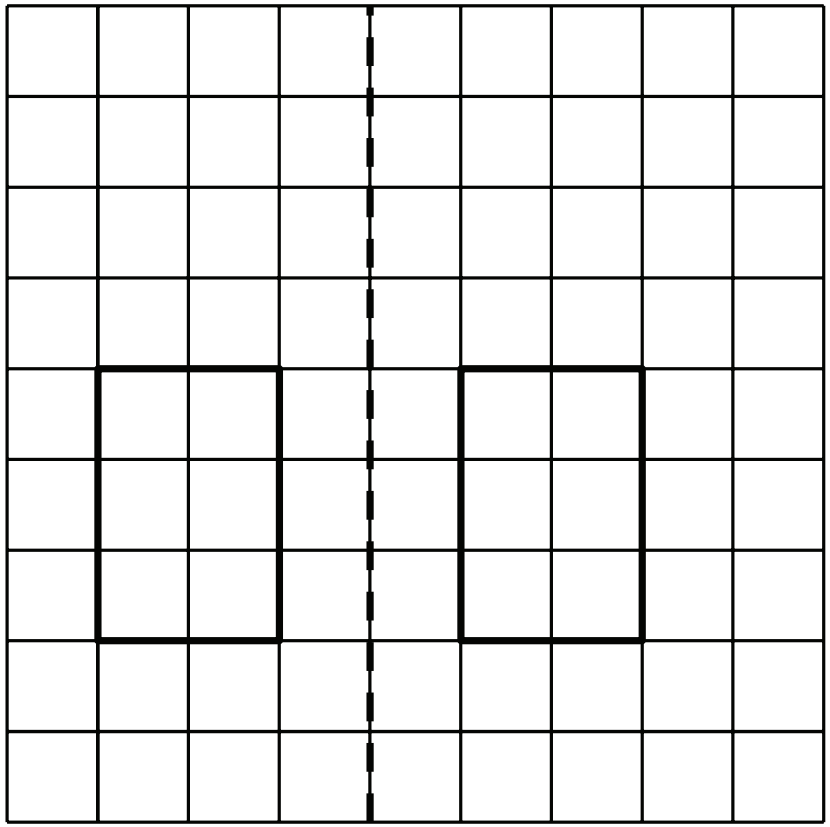


Key: ◯ = 1 person

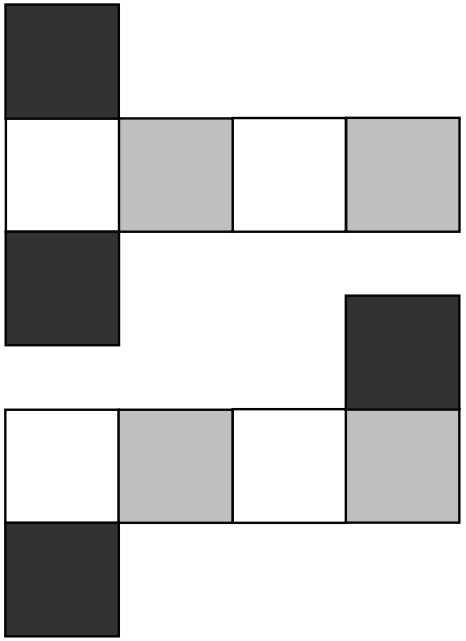
2 (alt)

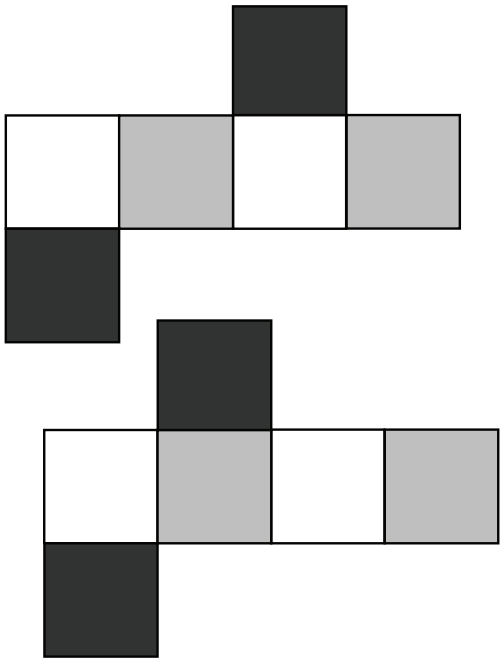


8



15b and c





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