1	(a)		3.0 – 3.2	1	B1	for in the range 3.0 – 3.2

2	(b)		85	1	B1	for 83 – 87

3	(b)		6.5	1	B1	Accept 6.4 – 6.6

4	(c)		760	1	B1	Allow 760(.000…)

5	2 [litres] = 2000 [millilitres] or 300 [millilitres] = 0.3 [litres]		3	B1	oe for a correct conversion within working
	"2000" ÷ 300 (= 6.66...) oe **or** 2 ÷ "0.3" (= 6.66...) oe **or** 300 + 300 + 300 + 300 + 300 + 300 (= 1800) oe **or** 0.3 + 0.3 + 0.3 + 0.3 + 0.3 + 0.3 (= 1.8) oe **or** 300 + 300 + 300 + 300 + 300 + 300 + 300 (= 2100) oe **or** 0.3 + 0.3 + 0.3 + 0.3 + 0.3 + 0.3 + 0.3 (= 2.1) oe			M1	Allow use of their converted values Allow 300 + …. + 300 = 1800 or 0.3 + …. + 0.3 = 1.8 If adding 300 or 0.3 they must have sufficient values just below or just above their amount of squash
	Working not required, so correct answer scores full marks (unless from obvious incorrect working eg a wrong conversion)	200 millilitres or 0.2 litres		A1	Must have correct units (m*l* or *l* can be used) Must come from correct working
					Total 3 marks

6	8 + 3 × 4.50 (= 21.5)			M1	
	(30 – '21.5') ÷ 1.1 (= 7.72... or 7) or 8.5 ÷ 1.1 (= 7.72... or 7)			M1	method to find the number of packets of seeds – could be repeated addition
	30 – '21.5' – '7' × 1.1 or 8.5 – 7.7			M1	complete method to find the change
		0.8(0)	4	A1	
					Total 4 marks

7	$7^2-(10\div 2)^2\,(=24)$ or $\frac{\sin\left(\frac{1}{2}x\right)}{5}=\frac{\sin 90}{7}$ oe or $\cos x=\frac{7^2+7^2-10^2}{2\times 7\times 7}$ oe or $\sin\left(\frac{1}{2}x\right)=\frac{5}{7}$ oe or $\cos y=\frac{5}{7}$ oe		5	M1	or use of sine rule or cosine rule to find angle (x) of the apex or angle y $\left(=90-\frac{1}{2}x\right)$
	$\sqrt{7^2-(10\div 2)^2}$ $(=\sqrt{24}=2\sqrt{6}=4.898...)$ or $(x=)2\times\sin^{-1}\left(\frac{5\times\sin 90}{7}\right)(=91.169\ldots)$ oe or $(x=)2\times\sin^{-1}\left(\frac{5}{7}\right)(=91.169\ldots)$ oe or $(x=)\cos^{-1}\left(\frac{7^2+7^2-10^2}{2\times 7\times 7}\right)(=91.169\ldots)$ oe or $(x=)2\left(90-\cos^{-1}\left(\frac{5}{7}\right)\right)(=2(90-44.415)...=91.169...)$ Allow 5 from correct working			M1	for complete method to find height of triangle or the angle (x) of the apex $\cos^{-1}\left(\frac{5}{7}\right)(=44.415...)$ **and** $5\times\tan'44.415...'(=4.898...)$ or $7\times\sin'44.415...'(=4.898...)$ **or** $\sin^{-1}\left(\frac{5}{7}\right)(=45.584...)$ **and** $\frac{5}{\tan'45.584...'}(=4.898...)$ or $7\times\cos'45.584...'(=4.898...)$
	E.g. $6\times 10+\frac{(10\div 2)\times'\sqrt{24}'}{2}\times 2$ $(=60+10\sqrt{6}=84.494...)$ **or** $5\times\left(6+6+'\sqrt{24}'\right)(=60+10\sqrt{6}=84.494...)$ **or** $\left(\frac{1}{2}\times 7\times 7\times\sin'91.169...'+10\times 6\right)(=60+10\sqrt{6}=84.494...)$			M1	for method to find the total area of the pentagon allow answers in the range 84.49 – 85
	E.g. '84.494' ÷ 16 (= 5.28...) or $\left(60+10\sqrt{6}\right)\div 16(=5.28...)$			M1	for method to find the number of tins required using their area
		6		A1	dep on at least M2
					Total 5 marks

8	6×100 (= 600) **or** $17.5 \div 100$ (= 0.175)		3	B1	
	"600" ÷ 17.5 (= 34.28…) **or** 6 ÷ "0.175" (= 34.28…)			M1	ft incorrect conversion
		34		A1	cao
					Total 3 marks

9	3 kg = 3000 g or 150 g = 0.15 kg or 180 g = 0.18 kg or 1350 g = 1.35(0) kg		3	B1	may be seen used as part of a calculation
	$3 \times 150 + 5 \times 180$ (= 1350) $3 \times 0.15 + 5 \times 0.18$ (=1.35(0))			M1	Could use their converted values
		1650		A1	
					Total 3 marks

10	$9.2 \times \frac{500}{1000}$ **or** 9.2 ÷ 2 (= 4.6) oe		4	M1	for a method to find the cost of 500g of Cheddar
	6.3 – "4.6" (= 1.7)			M1	for a method to find the cost of 200g of Stilton
	"1.7" $\times \frac{1000}{200}$ **or** "1.7" × 5 oe			M1	for a complete method to find the cost of 1kg of Stilton
		8.5(0)		A1	
					Total 4 marks

11	e.g. 5950 ÷ 1000 (= 5.95) **or** 9000 ÷ 1000 (= 9) **or** 14.5 × 1000 (= 14 500) **or** 30 × 1000 (= 30 000) **or** (5950 + 9000) ÷ 1000 (= 14.95)		3	M1	for one correct conversion
	e.g. "5.95" + 14.5 + "9" (= 29.45) **or** "14.95" + 14.5 (= 29.45) **or** **or** 5950 + "14 500" + 9000 (= 29 450) **or** 30 000 – (5950 + "14 500" + 9000) = 550 **or** 30 – ("5.95" + 14.5 + "9") = 0.55(0)			M1	for a complete method for adding with their adjusted figures
		Shown with correct figures		A1	e.g. Shown with 29.45 Shown with 29 450 Shown 550 Shown 0.55(0)
					Total 3 marks

12	6 hrs 40 mins or $6\frac{2}{3}$ or $\frac{20}{3}$ or 400 mins		4	B1	
	e.g. $(6 \times 60 + 40) \times 60$ (= 24 000) oe or "their 400" × 60 (= 24 000) oe or $\frac{60}{8}$ (= 7.5) oe or $\frac{60 \times 60}{8}$ (= 450) oe or 7.5×60 (= 450) oe			M1	for converting their time difference into seconds **or** finding the number of bolts produced in 1 minute oe **or** finding the number of bolts produced in one hour oe
	e.g. "24 000" ÷ 8 oe or "their 400" × "7.5" oe or "their $6\frac{2}{3}$" × "450" oe			M1	for a complete method to find how many bolts are produced
		3000		A1	
					Total 4 marks