Question		Working	Answer	Mark	Notes	
3	a		y^{14}	1	B1	
	b		$16m^{12}$	2	B2	if not B2 then B1 for am^{12} **or** $16m^{b}$ **or** 2^4m^{12} $b \neq 0, 12$ $a \neq 1, 16$
	c	$5x + 15 = 3x - 4$ **or** $x + 3 = \frac{3x}{5} - \frac{4}{5}$ e.g. $5x - 3x = -4 - 15$	$-\frac{19}{2}$ oe	3	M1 M1 A1	for removing bracket in a correct equation or dividing all terms by 5 in a correct equation ft from $ax + b = cx + d$ for correctly isolating terms in x on one side of equation and constant terms on the other side dep on at least M1
	d (i)		$(x - 4)(x + 6)$	2	M1 A1	for $(x + a)(x + b)$ where either $ab = -24$ **or** $a + b = +2$ e.g $(x - 6)(x + 4)$
	(ii)		$4, -6$	1	B1	cao **or** ft from any $(x + p)(x + q)$
4	a (i)		1, 2, 3, 4, 6, 12	1	B1	cao
	(ii)		1, 3, 5, 7, 9, 10, 11	1	B1	cao
	b		Yes with reason	1	B1	e.g. no numbers in both A and C **or** A and C do not intersect **or** A and C do not overlap **or** A and C are mutually exclusive
	c		$\frac{10}{12}$ oe	2	M1 A1	for $12 - 2$ (=10) **or** $\frac{a}{12}$ with $a < 12$ **or** 10 and 12 used with incorrect notation E.g. 10 : 12 for $\frac{10}{12}$ oe **or** 0.83(3…) **or** 83(.3..)%