$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
(d) $gc - 2h$ 2 B2 (B1 for one conditions) $gc - 2h$ 2 B2 (B1 for one conditions) $gc - 2h$ 3 B1 (f) $gc - g = 7t$ or $gc - gc - g = 7t$ or $gc - gc - gc - gc$ 3 B1 (B1 for one conditions) $gc - gc - gc$ 3 B2 (B1 for one conditions) $gc - gc - gc$ 3 B1 (B1 for one conditions) $gc - gc - gc$ 3 B2 (B1 for one conditions) $gc - gc - gc$ 3 B2 (B1 for one conditions) $gc - gc$ 3 B1 (B1 for one conditions) $gc - gc$ 3 B2 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 4 B1 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 4 B1 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 4 B2 (B1 for one conditions) $gc - gc$ 6 B2 (B1 for one conditions) $gc - gc$ 6 B2 (B1 for one conditions) $gc - gc$ 6 B2 (B1 for one conditions) $gc - gc$ 6 B2 (B1 for one conditions) $gc - gc$ 6 B2 (B1 for one conditions) $gc - gc$ 6 B2 (B1 for one conditions) $gc - gc$ 6 B2 (B1 for one conditions) $gc - gc$ 6 B2 (B1 for one conditions) $gc - gc$ 6 B2 (B1 for one conditions) $gc - gc$ 6 B2 (B1 for one conditions) $gc - gc$ 6 B2 (B1 for one conditions) $gc - gc$ 7 B2 (B1 for one conditions) $gc - gc$ 7 B2 (B1 for one conditions) $gc - gc$ 7 B2 (B1 for one conditions) $gc - gc$ 7 B2 (B1 for one conditions) $gc - gc$ 8 B2 (B1 for one conditions) $gc - gc$ 8 B2 (B1 for one conditions) $gc - gc$ 8 B2 (B1 for one conditions) $gc - gc$ 8 B2 (B1 for one conditions) $gc - gc$ 8 B2 (B1 for one conditions) $gc - gc$ 8 B2 (B1 for one conditions) $gc - gc$ 8 B2 (B1 for one conditions) $gc - gc$ 8 B2 (B1 for one conditions) $gc - gc$ 8 B2 (B1 for one conditions) $gc - gc$ 8 B	
(e) $5(2d+3)$ 1 B1 (f) $e-g=7t$ or $\frac{e}{7}=t+\frac{g}{7}$ oe 2 M1	
(f) $e - g = 7t$ or $\frac{e}{7} = t + \frac{g}{7}$ oe 2 M1	rect term)
$e - g = n \text{ or } \frac{1}{7} = t + \frac{9}{7} \text{ oe}$	
$\frac{e-g}{}$ Al oe e.g. $(e-g)$	
	÷7
7	
	Total 8 marks
2 (a) 5cd 1 B1	
(d) $6k+11m$ 2 B2 If not B2 then	nward
B1 for 6k or 11	
<b>3</b> a   g <sup>10</sup>   1   B1	
b $9c^2d^8$ 2 B2 B1 for 2 out of	3 terms correct as
part of a produ	
part of a produ	
1 . 1 . 1	
4 a 15rt 1 B1 oe	
5 d $\frac{n^{11}}{n^5}$ <b>OR</b> $n^{-1} \times n^7$ <b>OR</b> $n^4 \times n^2$ <b>OR</b> M1 for simplifying two terms	
$\frac{1}{n^5}$ OR $n \times n'$ OR $n' \times n''$ OR	
$n^4 \times n^7 \times n^{-5}$ <b>OR</b> $n^{"11"} \div n^5 = n^{("11"-5)}$	
n <sup>6</sup> 2 A1	
" 2 111	
	parts of the product
7 (a) $11m-3k$ 2 B2	
If not B2 then award B1 for either 11.	<i>n</i> or −3 <i>k</i>
8 (a) 10ab 1 B1	
8 (a) 10 <i>ab</i> 1 B1	
	not 30 v d
9 (a) 30 <i>d</i> 1 B1 Allow <i>d</i> 30 but	not 30×d
	not 30×d
9 (a) 30d 1 B1 Allow d30 but (b) 4e 1 B1 cao	not 30×d
9 (a) 30 <i>d</i> 1 B1 Allow <i>d</i> 30 but	not 30×d
9 (a)         30d         1         B1         Allow d30 but           (b)         4e         1         B1         cao	
9 (a)         30d         1         B1         Allow d30 but           (b)         4e         1         B1         cao           10 (a)         w <sup>5</sup> 1         B1           (b)         15ac         1         B1 or a15c or ac15 or c15a or	e
9 (a)   30d   1   B1   Allow d30 but     (b)   4e   1   B1   cao	e ss)
9 (a)         30d         1         B1         Allow d30 but           (b)         4e         1         B1         cao           10 (a)         w <sup>5</sup> 1         B1           (b)         15ac         1         B1 or a15c or ac15 or c15a or	e ss)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	e ss) not for -7 <i>f</i> )
9 (a)         30d         1         B1         Allow d30 but           (b)         4e         1         B1         cao           10 (a)         w <sup>5</sup> 1         B1           (b)         15ac         1         B1 or a15c or ac15 or c15a or (NB: no multiplication sign of the control o	e ss) not for -7 <i>f</i> )
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	e ss) not for -7 <i>f</i> )
9 (a)   30d   1   B1   Allow d30 but     (b)   4e   1   B1   cao	e (s)
9 (a)   30d   1   B1   Allow d30 but     (b)   4e   1   B1   cao	e (s) $= 100 \text{ rot for } -7f$ ) $= 9ef \text{ award}$
9 (a)         30d         1         B1         Allow d30 but           10 (a) $w^5$ 1         B1           (b)         15ac         1         B1 or a15c or ac15 or c15a or (NB: no multiplication sign           (c)         2e + 7f         2         B2 (B1 for 2e or +7f or 7f but)           Do not isw so if you see 2e B1 only           (d)         eg $5x - x = 12 + 7$ or $-7 - 12 = x - 5x$ 3         M1 for rearrangement with $x$ te and numerical terms on the	e (s) $= 1$ not for $= 7f$ ) $= 9ef$ award $= 1$ ms on one side other in a correct
9         (a)         30d         1         B1         Allow d30 but           10         (a) $w^5$ 1         B1           (b)         15ac         1         B1 or a15c or ac15 or c15a or (NB: no multiplication sign (NB: no multiplication sign (SB) or according to the control of the co	e (s) $= 1$ not for $= 7f$ ) $= 1$
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	e (s) $= 1$ not for $= 7f$ ) $= 1$
9(a) $30d$ 1B1Allow d30 but(b) $4e$ 1B1cao  10(a) $w^5$ 1B1(b) $15ac$ 1B1 or $a15c$ or $ac15$ or $c15a$ o	e (s) $= 100$ not for $= 7f$ ) $= 100$
9 (a) 30d 1 B1 Allow d30 but (b) 4e 1 B1 cao  10 (a) $w^5$ 1 B1  (b) 15ac 1 B1 or a15c or ac15 or c15a or (NB: no multiplication sign (c) 2e + 7f 2 B2 (B1 for 2e or +7f or 7f but Do not isw so if you see 2e B1 only  (d) eg $5x - x = 12 + 7$ or $-7 - 12 = x - 5x$ 3 M1 for rearrangement with x te and numerical terms on the equation or the correct sim terms or numbers on one si equation $4x - 7 = 12$ or $5x = x + 19$ oe M1 x terms simplified and numerical terms on the equation	e (a) (a) (b) (a) (a) (b) (a) (a) (a) (a) (a) (a) (a) (a) (a) (a
9(a) $30d$ 1B1Allow d30 but(b) $4e$ 1B1cao  10(a) $w^5$ 1B1(b) $15ac$ 1B1 or $a15c$ or $ac15$ or $c15a$ o	e (a) (a) (b) (a) (a) (b) (a) (a) (a) (a) (a) (a) (a) (a) (a) (a
9 (a) 30d 1 B1 Allow d30 but (b) 4e 1 B1 cao  10 (a) $w^5$ 1 B1  (b) 15ac 1 B1 or a15c or ac15 or c15a or (NB: no multiplication sign (NB: no multiplication sign of the equation or the correct simple terms or numbers on one sign at $4x - 7 = 12$ or $5x = x + 19$ oe  10 (a) $30d$ 1 B1 or $30d$ 1	e (s) $= 1 \cdot 1 $
9 (a) 30d 1 B1 Allow d30 but (b) 4e 1 B1 cao  10 (a) $w^5$ 1 B1  (b) 15ac 1 B1 or a15c or ac15 or c15a or (NB: no multiplication sign (NB: no multiplication sign or the correct simple or $4x-7=12$ or $5x=x+19$ oe 30 M1 for rearrangement with $x$ to the equation or the correct simple terms or numbers on one sign of the correctly in an example of $4x=19$ or $-4x=-19$ M1 $x$ terms simplified and numerical terms or the simplified correctly in an example $4x=19$ or $-4x=-19$ M1 $x$ terms simplified correctly in an example $x$ or $x$ and $x$ terms simplified correctly in an example $x$ or $x$ and $x$ terms simplified correctly in an example $x$ or $x$ and $x$ terms simplified correctly in an example $x$ or $x$ and $x$ terms simplified correctly in an example $x$ or $x$ and $x$ terms simplified correctly in an example $x$ and $x$ terms simplified correctly in an example $x$ and $x$ terms simplified correctly in an example $x$ and $x$ terms simplified and $x$ terms simplified correctly in an example $x$ and $x$ terms $x$ the $x$ terms $x$ the $x$ terms $x$ terms $x$ the $x$ terms $x$	e (s) $= 1 \cdot 1 $
9 (a) 30d 1 B1 Allow d30 but (b) 4e 1 B1 cao  10 (a) $w^5$ 1 B1  (b) 15ac 1 B1 or a15c or ac15 or c15a or (NB: no multiplication sign (NB: no multiplication sign or the correct simple or $4x-7=12$ or $5x=x+19$ oe 30 M1 for rearrangement with $x$ terms or numbers on one singular equation $x$ and $x$ are simplified and numerical terms or none singular equation $x$ and $x$ are simplified and numerical terms or numbers on one singular equation $x$ and $x$ are simplified and numerical terms or numbers on one singular equation $x$ and $x$ are simplified correctly in an example $x$ and $x$ are simplified and numerical terms or numbers on one singular equation $x$ and $x$ are simplified correctly in an example $x$ and $x$ are simplified correctly in an example $x$ and $x$ are simplified correctly in an example $x$ and $x$ are simplified correctly in an example $x$ and $x$ are simplified $x$ and $x$ are simplified correctly in an example $x$ and $x$ are simplified and $x$ are simplified correctly in an example $x$ and $x$ are simplified and $x$ are simplified and $x$ are simplified correctly in an example $x$ and $x$ are simplified $x$ and $x$ a	e (s) $= 1 \cdot 1 $
9 (a) 30d 1 B1 Allow d30 but (b) 4e 1 B1 cao  10 (a) $w^5$ 1 B1  (b) 15ac 1 B1 or a15c or ac15 or c15a or (NB: no multiplication sign (NB: no multiplication sign or the correct simple or $4x-7=12$ or $5x=x+19$ oe 30 M1 for rearrangement with $x$ to the equation or the correct simple terms or numbers on one sign of the correctly in an example of $4x=19$ or $-4x=-19$ M1 $x$ terms simplified and numerical terms or the simplified correctly in an example $4x=19$ or $-4x=-19$ M1 $x$ terms simplified correctly in an example $x$ or $x$ and $x$ terms simplified correctly in an example $x$ or $x$ and $x$ terms simplified correctly in an example $x$ or $x$ and $x$ terms simplified correctly in an example $x$ or $x$ and $x$ terms simplified correctly in an example $x$ or $x$ and $x$ terms simplified correctly in an example $x$ and $x$ terms simplified correctly in an example $x$ and $x$ terms simplified correctly in an example $x$ and $x$ terms simplified and $x$ terms simplified correctly in an example $x$ and $x$ terms $x$ the $x$ terms $x$ the $x$ terms $x$ terms $x$ the $x$ terms $x$	e (s) $= 1 \text{ not for } -7f$ ) $= 1 \text{ not for for } -7f$ ) $= 1  not for for for for for for for for for for$
9 (a) 30d 1 B1 Allow d30 but (b) 4e 1 B1 cao  10 (a) $w^5$ 1 B1  (b) 15ac 1 B1 or a15c or ac15 or c15a or (NB: no multiplication sign (NB: no multiplication sign or 15ac)  (c) 2e + 7f 2 B2 (B1 for 2e or +7f or 7f but Do not isw so if you see 2e B1 only  (d) eg $5x - x = 12 + 7$ or $-7 - 12 = x - 5x$ 3 M1 for rearrangement with $x$ tean d numerical terms on the equation or the correct simple terms or numbers on one since $4x - 7 = 12$ or $5x = x + 19$ oe $4x = 19 \text{ or } -4x = -19$ M1 $x$ terms simplified and numerical terms or numbers on one since $x = 10$ and $x = 10$ are $x = 10$ are $x = 10$ and $x = 10$ are $x = 10$ are $x = 10$ and $x = 10$ are $x = 10$ and $x = 10$ are $x = 10$ are $x = 10$ are $x = 10$ and $x = 10$ are $x = 10$ and $x = 10$ are $x = 10$ are $x = 10$ and $x = 10$ are $x = 1$	e (s) $= 1 \cdot 1 $
9 (a) 30d 1 B1 Allow d30 but (b) 4e 1 B1 cao  10 (a) $w^5$ 1 B1  (b) 15ac 1 B1 or a15c or ac15 or c15a or (NB: no multiplication sign (NB: no multiplication sign or 15ac)  (c) 2e + 7f 2 B2 (B1 for 2e or +7f or 7f but Do not isw so if you see 2e B1 only  (d) eg $5x - x = 12 + 7$ or $-7 - 12 = x - 5x$ 3 M1 for rearrangement with $x$ tean d numerical terms on the equation or the correct simple terms or numbers on one since $4x - 7 = 12$ or $5x = x + 19$ oe $4x = 19 \text{ or } -4x = -19$ M1 $x$ terms simplified and numerical terms or numbers on one since $x = 10$ and $x = 10$ are $x = 10$ are $x = 10$ and $x = 10$ are $x = 10$ are $x = 10$ and $x = 10$ are $x = 10$ and $x = 10$ are $x = 10$ are $x = 10$ are $x = 10$ and $x = 10$ are $x = 10$ and $x = 10$ are $x = 10$ are $x = 10$ and $x = 10$ are $x = 1$	e (s) $= 1 \text{ not for } -7f$ ) $= 1 \text{ not for for } -7f$ ) $= 1  not for for for for for for for for for for$
9(a) $30d$ 1B1Allow $d30$ but10(a) $w^5$ 1B1(b) $15ac$ 1B1 or $a15c$ or $ac15$ or $c15a$ or $(NB)$ : no multiplication sign(c) $2e + 7f$ 2B2 (B1 for $2e$ or $+7f$ or $7f$ buDo not isw so if you see $2e$ B1 only(d) $eg 5x - x = 12 + 7$ or $-7 - 12 = x - 5x$ 3M1 for rearrangement with $x$ te and numerical terms on the equation or the correct sim terms or numbers on one si equation $4x - 7 = 12$ or $5x = x + 19$ oeM1 $x$ terms simplified and num simplified correctly in an e $4x = 19$ or $-4x = -19$ M1 $x$ terms simplified correctly in an e $4x = 10$ or $-4x = -19$ A1 oe, $eg \frac{19}{4}$ or $4\frac{3}{4}$ dep on M	e (s) $= 1 \text{ not for } -7f$ ) $= 1 \text{ not for for } -7f$ ) $= 1  not for for for for for for for for for for$
9 (a) $30d$ 1         B1         Allow d30 but           10 (a) $w^5$ 1         B1           (b) $15ac$ 1         B1 or a15c or ac15 or c15a or (NB: no multiplication sign           (c) $2e + 7f$ 2         B2 (B1 for $2e$ or $+7f$ or $7f$ bu           Do not isw so if you see $2e$ B1 only           (d)         eg $5x - x = 12 + 7$ or $-7 - 12 = x - 5x$ 3         M1 for rearrangement with $x$ te and numerical terms on the equation or the correct sim terms or numbers on one si equation $4x - 7 = 12$ or $5x = x + 19$ oe         M1 $x$ terms simplified and num simplified correctly in an e           Working required $4.75$ A1 oe, eg $\frac{19}{4}$ or $4\frac{3}{4}$ dep on M           11 a $a^4$ 1         B1	e (s) $= 1 \text{ not for } -7f$ ) $= 1 \text{ not for for } -7f$ ) $= 1  not for for for for for for for for for for$
9 (a) $30d$ 1         B1         Allow $d30$ but           10 (a) $w^5$ 1         B1           (b) $15ac$ 1         B1         or a15c or ac15 or c15a or (NB: no multiplication sign (NB: no multiplic	e (s) Finot for $-7f$ ) $+7f = 9ef$ award  The amount of the side
9 (a) $30d$ 1         B1         Allow d30 but           10 (a) $w^5$ 1         B1           (b) $15ac$ 1         B1 or a15c or ac15 or c15a or (NB: no multiplication sign           (c) $2e + 7f$ 2         B2 (B1 for $2e$ or $+7f$ or $7f$ bu           Do not isw so if you see $2e$ B1 only           (d)         eg $5x - x = 12 + 7$ or $-7 - 12 = x - 5x$ 3         M1 for rearrangement with $x$ te and numerical terms on the equation or the correct sim terms or numbers on one si equation $4x - 7 = 12$ or $5x = x + 19$ oe         M1 $x$ terms simplified and num simplified correctly in an e           Working required $4.75$ A1 oe, eg $\frac{19}{4}$ or $4\frac{3}{4}$ dep on M           11 a $a^4$ 1         B1	e (s) Finot for $-7f$ ) $+7f = 9ef$ award  The amount of the side

13 ( 14 ( 15 ( 16 ( 17 (	(a) (b) (a) (a) (a) (b) (a) (b) (c)				$81k^{8}$ $7m^{4}n^{6}$ $13x - 2y$ $16x^{12}y^{2}$		2 2 2	B2 B2 B2 (B1 B2	B1 for 81 or $k^8$ seen in their final answer.  B1 for $7m^4$ or $n^6$ in a product with no other terms in $m$ or $n$ Total 4 marks  accept $-2y + 13x$ for $13x$ or $-2y$ )
13 ( 14 ( 15 ( 16 ( ( (	(a) (a) (b) (a) (b)				$13x - 2y = 16x^{12}y^{2t}$		2	B2 (B1	B1 for $7m^4$ or $n^6$ in a product with no other terms in $m$ or $n$ <b>Total 4 marks</b> accept $-2y + 13x$ for $13x$ or $-2y$ ) B1 for an answer in the form
13 ( 14 ( 15 ( 16 ( ( (	(a) (a) (b) (a) (b)				$13x - 2y = 16x^{12}y^{2t}$		2	B2 (B1	no other terms in $m$ or $n$ Total 4 marks  accept $-2y + 13x$ for $13x$ or $-2y$ )  B1 for an answer in the form
14 ( 15 ( 16 ( 17 ( (	(a) (a) (b) (a) (b)				$16x^{12}y^{26}$			(B1	Total 4 marks  accept $-2y + 13x$ for $13x$ or $-2y$ )  B1 for an answer in the form
14 ( 15 ( 16 ( 17 ( (	(a) (a) (b) (a) (b)				$16x^{12}y^{26}$			(B1	for $13x$ or $-2y$ )  B1 for an answer in the form
14 ( 15 ( 16 ( 17 ( (	(a) (a) (b) (a) (b)				$16x^{12}y^{26}$			(B1	for $13x$ or $-2y$ )  B1 for an answer in the form
15 ( 16 ( ( 17 (	(a) (b) (a) (b)					)	2		B1 for an answer in the form
15 ( 16 ( ( 17 (	(a) (b) (a) (b)					)	2	B2	
15 ( 16 ( ( 17 (	(a) (b) (a) (b)								n m 'd o
16 ( ( 17 ( (	(a) (b) (a) (b)				7				$ax^ny^m$ with 2 correct from
16 ( ( 17 ( (	(a) (b) (a) (b)				7 .			1	a = 16, n = 12, m = 20
16 ( ( 17 ( (	(a) (b) (a) (b)				7p-t		2	B2	Fully correct answer (allow -1t)
17 ((	(b) (a) (b)				·F ·				(B1 for 7 <i>p</i> or - <i>t</i> )
17 ((	(b) (a) (b)								
17 (	(a) (b)				24bc		1	B1 B1	oe
(	(b)				2400		1	DI	06
(					8 <i>a</i>		1	B1 ca	
	(c)				24 <i>b</i>		1	B1 ca	
18 (					27		1	B1 ca	
18 (									Total 3 marks
	(a)				7g – 2e		2	B2 or	r-2e+7g
									B2 then award
								BITO	r 7g or –2e
19 (	(a)		$c^6$		1	В	1		
	(b)		6h³		1	В			
	(c)		$x^2 + 5x$		1	В			
	(d)		3(3y - 4) $T = 15m +$	10	3	B		Fan 15	+ 40 ·· or T = 15 ··· + ··· or
(	(e)		I = 15m +	40 <i>p</i>	3	В			+40p  or  T = 15m + xp  or or $T = 40m + 15p)$
							(B1 f	or 15m +	-xp or $ym + 40p$ or
							40m	+ 15 <i>p</i> or	for $T =$ an incorrect expression in $m$
							and p	eg T = i	mp)) or m15 etc
							7 IIIOV	V 15 A M	Total 7 marks
	, ,								
20 (	(a)				2c + 7a		2	B2	(B1 for $2c$ or $7d$ )
	(b)				40 <i>ef</i>		1	B1	(B) let 2e et /u)
	(c)	5r = 8 + 3  or  5r = 11  or  -3 - 8 = -3					2	M1	for a correct first step
		$-11 = -5r$ or $r - \frac{3}{5} = \frac{8}{5}$ or $(8+3)$	÷ 5						or for a calculation for $r$
<del></del>		5 5			2.2			A1	oe
					2.2			711	Total 5 marks
21 (	(a)				9-	,	1	B1	
(	(b)				12;	$\rho^2$	1	B1	
	(a)	T			6c +	24	2	B2	for $6c + 2d$ or $2d + 6c$
(	(e)				00 +	20	2	DZ	(B1 for $6c$ or $2d$ )
		•			•		•	•	
22 (	(a)				$w^9$		1	B1	
	(b)				$10m^7p^3$		2	B2	(B1 for 2 terms correct as part of a
							1		product) Total 3 marks
		I							1 Otal S marks
23 (	(a)				45 <i>pk</i>		1	B1 ac	ccept 45kp
	(b)				11e – 5	f	2	B2 fc	or 11e – 5f
								(B1 f	For 11e or -5f)
	(a)	1		1	5		1	D1	
24 /	(a)	<u> </u>		1	c <sup>5</sup>		1 1	B1	
24 (									
24 (	(b)			$27a^{6}$	$h^{12}$	2	B2 (I	31 for 2	of 3 parts in a product)

26	(a)		12 <i>ac</i>	1	B1	
	(b)		5d – 2e	2	B2	for $5d - 2e$ oe
						(B1 for $5d$ or $-2e$ )
	(c)	$4x = 23 + 7$ or $4x = 30$ oe or $x - \frac{7}{4} = \frac{23}{4}$ or		2	M1	for a correct first step  or a correct calculation for x
		$(23+7) \div 4 \text{ or } 30 \div 4$				
		Correct answer scores full marks (unless from obvious incorrect working)	7.5		A1	oe eg $\frac{15}{2}$ , $7\frac{1}{2}$ , $\frac{30}{4}$
						Total 5 marks

27	(a)	4p	1	B1	
	(b)	12e + 4f	2	B2	B1 for 12 <i>e</i> or 4 <i>f</i>