Do now

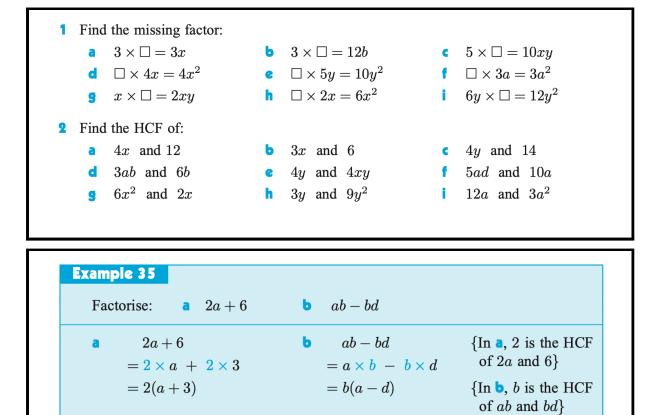
^{1.⊎} Expand: 3(7 - q)	2.5 Expand: 9(n + 3)	3.5 Expand: 10(7 + 6j)	4.υ Expand: 8(8r + 4)
^{₅.} • Expand: 4(7 - g)	^{6.⊎} Expand: 10(9 + 10q)	^{7.₅} Expand: 8(f + g - 6)	^{8.₀} Expand: 5(h - j + 3)
^{9.⊍} Expand: 7(10 - 2k)	^{10.⊎} Expand: 5t ² (8uv - 9t ³)	^{11.⊍} Expand: -8(r + t - 10)	^{12.} Expand: -7f ² (8gh + 9f ⁴)
^{13.⊎} Expand: -5(y - a - 9)	Expand: -6(h + j - 2)	^{15.} Expand: -8x ³ (5ya + 2x ²)	^{16.0} Expand: -8m ⁵ (3m ⁵ + 6np)

Walt Factorise algebraic terms

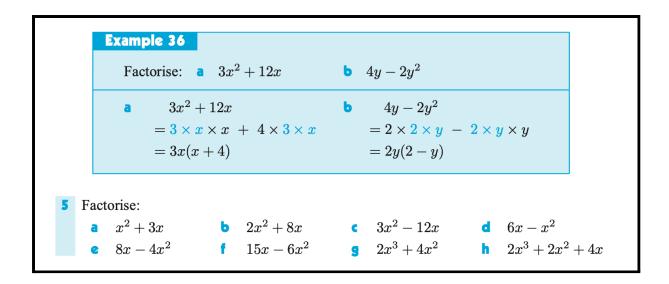
Success criteria I know how to find the highest common factor I need to put a bracket after removing the common factor to keep the remaining terms inside the bracket.

	Factorisa	tion is the reverse process o	of expansion.
For example:	3(x+2) = 3x	x+6 is expansion	
	3x + 6 = 3(x	+2) is factorisation.	
In the factorisati	on of an algeb	raic expression we have to i	insert a bracket.
Example 34		e inserted.	
Example 34			
place it before the Example 34 Find the H	ICF of:	b 4ab and 2b	• $5x^2$ and $10x$
Example 34 Find the F a 3a and	HCF of: d 9	b 4ab and 2b	c $5x^2$ and $10x$ c $5x^2 = 5 \times x \times x$
Example 34 Find the F a 3a and a 3d	HCF of: d 9 $a = \frac{3}{3} \times a$	b $4ab$ and $2b$ b $4ab = 2 \times 2 \times a \times b$	

Introduction to factorisation



3 Fact	torise:						
e	5a + 10 $11a + 22b$ $25x + 20$	f	6a + 8 $16x + 8$ $x + ax$	9	6a + 12b 4a + 8 3x + mx	h	4 + 8x $10 + 15y$ $ac + an$
e	torise: 2a - 10 6x - 14 20b - 25	- f	4y - 20 14y - 7 16b - 24	9	$egin{array}{llllllllllllllllllllllllllllllllllll$	h	6x - 24 10 - 15b ab - ac



Factorise expressions simple examples

.*	^{2.υ}	^{3.υ}	^{4.υ}
21 - 3q	9n + 27	70 + 60j	64r + 32
28 - 4g	^{ճ.Ե}	^{7.υ}	³.₀
	90 + 100q	8f + 8g - 48	5h - 5j + 15
™ 70 - 14k	^{10.⊎} 40t ² uv - 45t ⁵	^{11.0} -8r + -8t80	^{12.} -56f ² gh + -63f ⁶
³.₀	^{14.⊍}	^{¹₅.} ₀	^{16.⊍}
-5y5a45	-6h + -6j12	-40x ³ ya + -16x ⁵	-24m ¹⁰ + -48m ⁵ np

Answers

1	a	x b $4b$ c $2xy$ d x e $2y$ f a
	g	2y h $3x$ i $2y$
2	a	4 b 3 c 2 d 3b e 4y f 5a
	g	2x h $3y$ i $3a$
3	a	5(a+2) b $2(3a+4)$ c $6(a+2b)$
	d	
	g	4(a+2) h $5(2+3y)$ i $5(5x+4)$
	g j	x(1+a) k $x(3+m)$ l $a(c+n)$
4	a	2(a-5) b $4(y-5)$ c $3(b-4)$
	d	6(x-4) e $2(3x-7)$ f $7(2y-1)$
	g	5(a-3) h $5(2-3b)$ i $5(4b-5)$
	g j	8(2b-3) k $x(1-y)$ l $a(b-c)$
5	a	x(x+3) b $2x(x+4)$ c $3x(x-4)$
	d	
	g	$2x^2(x+2)$ h $2x(x^2+x+2)$