

Factorising

2008 PI	<p>2. Factorise fully</p> $5x^2 - 45.$	2	
Ans	$5(x - 3)(x + 3)$		
2006 PI	<p>5. (a) Factorise</p> $4x^2 - y^2.$ <p>(b) Hence simplify</p> $\frac{4x^2 - y^2}{6x + 3y}.$	1	
Ans	<p>(a) $(2x - y)(2x + y)$ (b) $\frac{2x - y}{3}$</p>		
2003 PI	<p>5. Factorise</p> $2x^2 - 7x - 15.$	2	
Ans	$(2x + 3)(x - 5)$		
2002 PI	<p>5. (a) Factorise $p^2 - 4q^2$.</p> <p>(b) Hence simplify</p> $\frac{p^2 - 4q^2}{3p + 6q}.$	1	
Ans	<p>5. (a) $(p - 2q)(p + 2q)$</p> <p>(b) $\frac{(p - 2q)(p + 2q)}{3(p + 2q)} = \frac{p - 2q}{3}$</p>		
2001 PI	<p>6. A is the point (a^2, a).</p> <p>T is the point (t^2, t), $a \neq t$</p> <p>Find the gradient of the line AT.</p> <p>Give your answer in its simplest form.</p>	3	
Ans	$\frac{1}{t + a}$		

2000 P1	4. (a) Factorise $x^2 - 16$.	1	
Ans	$(x - 4)(x + 4)$		