

## Answers

Essential Skills 5	
1	$c = \sqrt{\frac{A-d}{b}}$
2	$r = \sqrt{\frac{V}{\pi h}}$
3	$t = \frac{H^2}{f}$
4	$p = \frac{d^2}{W}$
5	$v = \frac{\sqrt{g}}{ip}$
6	$a = \frac{2A}{b \sin C}$
7	$h = \sqrt[3]{\frac{w+d}{g}}$
8	$h = \frac{tP}{5s}$
9	$a = \frac{Df-3b}{3}$
10	$t = \frac{T^3+3}{6}$
AQ	(a) $384\text{cm}^3$ (b) 4.5cm

Essential Skills 7	
1	$(a+b)(a-b)$
2	$(x+3)(x-3)$
3	$(2a+d)(2a-d)$
4	$(3f+8)(3f-8)$
5	$(p+5)(p-5)$
6	$(2p+9)(2p-9)$
7	$(g+10h)(g-10h)$
8	$(3c+7d)(3c-7d)$
9	$(x+11)(x-11)$
10	$2(2a+3t)(2a-3t)$
AQ	(a) $3(j+k)(j-k)$ (b) 14.4

Essential Skills 6	
1	4
2	27
3	32
4	100
5	27
6	4
7	32
8	4
9	5
10	625
AQ	(1) $\frac{2}{x^{2/3}}, \frac{1}{2}$ (b) 243

Essential Skills 8	
1	$5x - 19$
2	$21w - 2st + 11$
3	$x^2 + 10x + 24$
4	$x^2 - 15x + 56$
5	$6x^2 + 5x - 4$
6	$5x^2 - 13x + 6$
7	$12x^2 - 5x - 2$
8	$x^2 + 8x + 16$
9	$4x^2 - 4x + 1$
10	$9s^2 - 24st + 16t^2$
AQ	$8y^2 + 10y + 5$