

2010 CREDIT PAPER 1 SOLUTIONS

1	$40\% \text{ Of } \pounds 11.50 = 1.15 \times 4$ $= \pounds 4.60$	$4.60 - 1.81 = \pounds 2.79$	2	
2	$\frac{2}{5} \times \frac{10}{11} = \frac{4}{11}$		2	
3	$2t = 7s + 4$ $7s = 2t - 4$ $s = \frac{2t - 4}{7}$	or $s = \frac{1}{7}(2t - 4)$	3	
4	$x^2 - 4x = 2x + 7$ $x^2 - 6x - 7 = 0$			2
b)	$(x - 7)(x + 1) = 0$ $x = 7$ or $x = -1$			2
5	$1 - \frac{4}{9} = \frac{5}{9}$		1	
b)	$\frac{5}{9}$ of 27 = 15			1
6	$120\% = 900$ $10\% = 900 / 12 = 75$ $100\% = 75 \times 10$ $= 750g$		3	
7	$7 = 2m + c$		1	
b)	$17 = 4m + c$		1	
c)	$17 = 4m + c$ $- 7 = 2m + c$ $\hline 10 = 2m$ $m = 5$	$c = -3$		3
d)	Gradient = 5			1
8	$\sqrt{36} = 6$		1	
b)	$\sqrt{2} + 3\sqrt{2} = 4\sqrt{2}$		1	
c)	$\frac{6}{4\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = \frac{6\sqrt{2}}{8} = \frac{3\sqrt{2}}{4}$		2	

9	$0 = \frac{1}{3}x + 2$ $\frac{1}{3}x = -2$ $x = -6 \quad \text{point } (-6, 0)$	2	
b)	$x < -6$		1
10	$\frac{5^2 \times 6^2}{4}$		1
b)	$\frac{n^2(n+1)^2}{4}$		2
c)	$\frac{9^2 \times 10^2}{4} = \frac{81 \times 100}{4} = 2025$		2
11	$\frac{1}{2} \times \frac{x}{2} \times 1 = \frac{1}{2} \times 3(x-1)$ $\frac{x}{2} = 3(x-1)$ $x = 6(x-1)$ $x = 6x - 6$ $6 = 5x$ $x = \frac{6}{5} \quad \text{or } x = 1.2$		4