01. 0607_m23_ms_22 Q: 10

Question	Answer	Marks	Partial Marks
	$\sqrt{45}$ or $3\sqrt{5}$ final answer	3	**M2** for $(5-2)^2+(3-9)^2$ oe or **M1** for $(5-2)$ or $(3-9)$ oe

02. 0607_s23_ms_23 Q: 16

Question	Answer	Marks	Partial Marks
	(3, 3.5) oe	5	**M1** for grad $AB = \frac{5-3}{6-2}$ oe or better **M1** for equation of AB $y = 0.5x + 2$ oe **M1** for grad $CD = \frac{-1}{their\ \text{grad}\ AB}$ **M1** for $\frac{5.5 - their(0.5p+2)}{2-p} = their\ \text{grad}\ CD$ oe where 'p' is x-coordinate of C If 0 scored, **SC1** for $(3, k)$ or $(k, 3.5)$

03. 0607_s22_ms_22 Q: 10

Question	Answer	Marks	Partial Marks
	$[y =] -3x + 10$	3	**M1** for [Grad=] $\frac{13-1}{-1-3}$ oe **M1** for subst *their* grad and A or B correctly into $y = mx + c$. or **M1** for $y - 1 = their(-3) \times (x - 3)$ or $y - 13 = their(-3) \times (x + 1)$

04. 0607_s22_ms_23 Q: 10

Question	Answer	Marks	Partial Marks
(a)	(–2, 2.5) oe	2	**B1** for each coordinate

Question	Answer	Marks	Partial Marks
(b)	$y = \frac{2}{3}x - \frac{8}{3}$ oe	4	Equivalent 3 term equation. **M1** for gradient of $BC = \frac{-2-7}{1-(-5)}$ oe **M1** for gradient of $CD = -1 \div (their\ -\frac{3}{2})$ **M1** for substituting (1, – 2) and their m into $y = mx + c$ oe

05. 0607_s22_ms_23 Q: 12

Question	Answer	Marks	Partial Marks
	$4\sqrt{13}$	4	**B3** for $\sqrt{208}$ OR **B1** for $\begin{pmatrix} 8 \\ -12 \end{pmatrix}$ oe **M1** for $(their\ 8)^2 + (their(-12))^2$

06. 0607_w22_ms_21 Q: 10

Question	Answer	Marks	Partial Marks
	$y = \frac{1}{2}x + \frac{27}{4}$	5	**M1** for $\frac{11-5}{1-4}$ [= –2] **M1** for Grad perp $= -\frac{1}{their(-2)}$ **B1** for mid-point (2.5, 8) **M1** for correct substitution of *their* mid-point and gradient into $y = mx + c$.

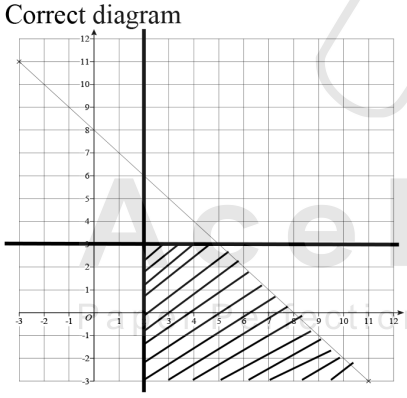
07. 0607_m21_ms_22 Q: 5

Question	Answer	Marks	Partial Marks
(a)	$(1, -1)$	**2**	**B1** for each
(b)	10	**3**	**M2** for $(5-(-3))^2+((-4)-2)^2$ oe or **M1** for $(5-(-3))$ or $((-4)-2)$ oe

08. 0607_s21_ms_21 Q: 11

Question	Answer	Marks	Partial Marks
	$[y=]\frac{2}{5}x+\frac{7}{5}$ oe final answer	**5**	**B1** for mid-point (4, 3) **M1** for [gradient =] $\frac{8--2}{2-6}$ oe **M1** for grad perp = $\frac{-1}{their\,(-2.5)}$ **M1** for correct substitution of *their* mid-point and *their* perpendicular gradient into $y = mx + c$

09. 0607_s21_ms_22 Q: 15

Question	Answer	Marks	Partial Marks
	Correct diagram 	**2**	**B1** for $x = 2$ and $y = 3$ drawn

10. 0607_w21_ms_21 Q: 12

Question	Answer	Marks	Partial Marks
(a)	*F*	**1**	
(b)	*C*	**1**	

11. 0607_w21_ms_23 Q: 7

Question	Answer	Marks	Partial Marks
	10	3	**M2** for $(9-3)^2+(7-(-1))^2$ oe or **M1** for $(9-3)$ or $(7-(-1))$ oe

12. 0607_s20_ms_22 Q: 14

Question	Answer	Marks	Partial Marks
	$[y=]-0.5x+11.25$	5	**B1** (2.5, 10) seen **M1** for gradient $=\frac{13-7}{4-1}$ oe **M1** grad of perp $=-1/$*their* grad **M1** for subst *their* grad and *their* (2.5, 10) into $y=mx+c$

13. 0607_s20_ms_23 Q: 8

Question	Answer	Marks	Partial Marks
	$3\sqrt{10}$	4	**B3** for $\sqrt{90}$ or **B1** for 9 and 3 seen **M1** for (*their* 9)^2 + (*their* 3)^2

14. 0607_w20_ms_21 Q: 13

Question	Answer	Marks	Partial Marks
	$y=\frac{1}{2}x+\frac{11}{4}$	5	**M1** for gradient $=\frac{7-1}{1-4}$ oe **M1** for gradient perp $=\frac{-1}{\textit{their}\text{ gradient}}$ **B1** for midpoint (2.5, 4) seen **M1** for subst *their* gradient (perp) and *their* mid-point into $y=mx+c$

15. 0607_s19_ms_21 Q: 11

Question	Answer	Marks	Partial Marks
(a)	(5, 4)	1	

Question	Answer	Marks	Partial Marks
(b)	$[y =] \frac{1}{2}x + 1\frac{1}{2}$ oe	3	**M1** for $\frac{8-0}{3-7}$ oe or gradient = –2 **M1** for gradient of perpendicular $= \frac{-1}{\textit{their}\text{ gradient}}$

16. 0607_s19_ms_22 Q: 9

Question	Answer	Marks	Partial Marks
	$y = 7 - x$ oe	2	**B1** for $y = k - x$ or for $y = 7 - kx$ or for $7 - x$

17. 0607_s19_ms_23 Q: 12

Question	Answer	Marks	Partial Marks
	(7, –1)	2	**B1** for (7, *k*) or (*k*, –1) If 0 scored **SC1** for (2.5, 2)

18. 0607_w19_ms_21 Q: 16

Question	Answer	Marks	Partial Marks
	$y = \frac{3}{4}x - \frac{9}{2}$ oe	4	**M1** for gradient of $AB = -\frac{4}{3}$ oe **M1** for gradient of $L = -\frac{1}{\textit{their} - \frac{4}{3}}$ **M1** for substitution of (6, 0) in *their* $y = mx + c$ oe

19. 0607_w19_ms_22 Q: 10

Question	Answer	Marks	Partial Marks
	$y = -\frac{4}{3}x + \frac{14}{3}$	5	**M1** for $\frac{1-(-5)}{9-1}$ oe **M1** for grad = $-\frac{1}{\textit{their}\text{ gradient}}$ **M1** for midpoint $\left(\frac{9+1}{2}, \frac{-5+1}{2}\right)$ oe **M1** for subst (*their* midpoint) and (*their* gradient) into $y = mx + c$

20. 0607_w19_ms_23 Q: 12

Question	Answer	Marks	Partial Marks
(a)	(0, –2)	1	
(b)	$\left(\frac{2}{3}, 0\right)$ oe	1	
(c)	$y = -\frac{1}{3}x - 2$ oe	2	**FT** *their* **(a)** **B1** for $m = -\frac{1}{3}$

21. 0607_s18_ms_22 Q: 8

Question	Answer	Marks	Partial Marks
	(3, 7)	2	**B1** for each

22. 0607_s18_ms_22 Q: 14

Question	Answer	Marks	Partial Marks
	$4x - 5$	3	**M1** for $\frac{11-3}{4-2}$ oe **M1** for correct substitution of *their* 'm' and a point

23. 0607_s18_ms_23 Q: 1

Question	Answer	Marks	Partial Marks
(a)	$x = -3$	1	
(b)	(–3, 2)	1	
(c)	$-\frac{1}{2}$ oe	2	**M1** for clear use of $\frac{y \text{ increase}}{x \text{ increase}}$ If 0 scored **SC1** for $\frac{1}{2}$

24. 0607_s18_ms_23 Q: 7

Question	Answer	Marks	Partial Marks
(a)	(9, 4)	2	**B1** for each co-ordinate
(b)	$3\sqrt{5}$	3	**M1** for $([-]6)^2 + 3^2$ **A1** for $\sqrt{45}$

25. 0607_w18_ms_21 Q: 8

Question	Answer	Marks	Partial Marks
	5	2	**M1** for $(1-4)^2+(9-5)^2$ oe

26. 0607_w18_ms_23 Q: 13

Question	Answer	Marks	Partial Marks
	$-\frac{1}{2}x+6$	3	**B1** for gradient = $-\frac{1}{2}$ **M1** for substitution of (2, 5) into $y=(their\ m)x+c$

27. 0607_s17_ms_21 Q: 11

Question	Answer	Marks	Part Marks
	$[y=]-2x+17$ oe	3	**M2** for $y=-2x+k$ or **M1** for $\frac{11-3}{3-7}$ soi

28. 0607_w17_ms_21 Q: 6

Question	Answer	Marks	Partial Marks
(a)	(–1, 8)	2	**B1** for each co-ordinate or for $\left(\frac{3-5}{2},\frac{6+10}{2}\right)$
(b)	$4\sqrt{5}$	3	**M1** for 8^2+4^2 **A1** for $\sqrt{80}$

29. 0607_w17_ms_23 Q: 2

Question	Answer	Marks	Partial Marks
	$\begin{pmatrix}3\\6\end{pmatrix}$	2	**B1** for each component

30. 0607_w17_ms_23 Q: 13

Question	Answer	Marks	Partial Marks
	$[y=]\frac{1}{2}x+\frac{5}{2}$	4	**B1** for (3, 4) seen **B1** for $-\frac{8}{4}$ oe seen **M1** for grad $=\frac{-1}{their(-2)}$