

01. 0607_s23_ms_21 Q: 3

Question	Answer	Marks	Partial Marks
(a)	$\begin{pmatrix} 6 \\ -1 \end{pmatrix}$	1	
(b)	$\begin{pmatrix} 3 \\ -4 \end{pmatrix}$	2	B1 for $\begin{pmatrix} 3 \\ k \end{pmatrix}$ or $\begin{pmatrix} k \\ -4 \end{pmatrix}$ If 0 scored, SC1 for $(3, -4)$

02. 0607_s23_ms_21 Q: 6

Question	Answer	Marks	Partial Marks
	Image at $(2, 1), (3, 2), (2, 3)$	2	B1 for correct orientation wrong position or for rotation 90° anticlockwise about $(2, 1)$

03. 0607_m22_ms_22 Q: 4

Question	Answer	Marks	Partial Marks
(a)	$\begin{pmatrix} 7 \\ 1 \end{pmatrix}$	2	B1 for $\begin{pmatrix} 4 \\ 6 \end{pmatrix}$ or $\begin{pmatrix} 7 \\ k \end{pmatrix}$ or $\begin{pmatrix} k \\ 1 \end{pmatrix}$
(b)	$(4, 10)$	1	

04. 0607_m22_ms_22 Q: 12

Question	Answer	Marks	Partial Marks
(a)	Enlargement [factor] 2 $(0, 0)$ oe	3	B1 for each
(b)	Image at $(3, 1), (3, 2), (7, 2)$	2	B1 for stretch factor 2 with invariant line $x = k$ or $y = 1$ if 0 scored, SC1 $(3, 1), (3, 2), (k, 2), k > 4$

05. 0607_s22_ms_21 Q: 2

Question	Answer	Marks	Partial Marks
	$\begin{pmatrix} 24 \\ -8 \end{pmatrix}$	1	

06. 0607_s22_ms_21 Q: 10

Question	Answer	Marks	Partial Marks
	$2\sqrt{10}$	2	M1 for $\sqrt{6^2 + 2^2}$ or $\sqrt{40}$

07. 0607_w22_ms_22 Q: 7

Question	Answer	Marks	Partial Marks
(a)	Translation $\begin{pmatrix} 2 \\ -5 \end{pmatrix}$	2	B1 for each
(b)	Enlargement or reduction and centre (2, 3)	1	
	Scale factor $\frac{1}{2}$	1	

08. 0607_m21_ms_22 Q: 2

Question	Answer	Marks	Partial Marks
	$\begin{pmatrix} -5 \\ -3 \end{pmatrix}$	2	B1 for $\begin{pmatrix} -5 \\ k \end{pmatrix}$ or $\begin{pmatrix} k \\ -3 \end{pmatrix}$ If 0 scored SC1 for $\begin{pmatrix} 5 \\ 3 \end{pmatrix}$

09. 0607_s21_ms_21 Q: 8

Question	Answer	Marks	Partial Marks
(a)	$\begin{pmatrix} -8 \\ 0 \end{pmatrix}$	2	B1 for each
(b)	5	2	M1 for $3^2 + (-4)^2$ oe

10. 0607_s20_ms_21 Q: 2

Question	Answer	Marks	Partial Marks
(a)	$\begin{pmatrix} 4 \\ -3 \end{pmatrix}$	1	
(b)	(6, 4)	2	FT <i>their</i> (a) B1 for each coordinate

11. 0607_w20_ms_21 Q: 8

Question	Answer	Marks	Partial Marks
(a)	$\begin{pmatrix} -10 \\ 0 \end{pmatrix}$	2	B1 for each
(b)	5	2	M1 for $(-4)^2 + (-3)^2$ SOI by 25 If 0 scored, SC1 for -5

12. 0607_s19_ms_22 Q: 3

Question	Answer	Marks	Partial Marks
	$\begin{pmatrix} 5 \\ -3 \end{pmatrix}$	2	B1 for each If 0 scored, SC1 for $\begin{pmatrix} -3 \\ 5 \end{pmatrix}$

13. 0607_s19_ms_23 Q: 10

Question	Answer	Marks	Partial Marks
(a)	$\begin{pmatrix} 0 \\ 32 \end{pmatrix}$	2	B1 for $\begin{pmatrix} 0 \\ k \end{pmatrix}$ or $\begin{pmatrix} k \\ 32 \end{pmatrix}$
(b)	10	2	M1 for $6^2 + 8^2$ soi by 100

14. 0607_w19_ms_21 Q: 9

Question	Answer	Marks	Partial Marks
(a)	$\begin{pmatrix} 24 \\ -10 \end{pmatrix}$	1	
(b)	13	2	M1 for $12^2 + (-5)^2$ oe

15. 0607_w18_ms_22 Q: 4

Question	Answer	Marks	Partial Marks
(a)	$\begin{pmatrix} -9 \\ 15 \end{pmatrix}$	1	
(b)	$\sqrt{34}$	2	M1 for $(-3)^2 + 5^2$ oe

16. 0607_s17_ms_21 Q: 10

Question	Answer	Marks	Part Marks
	$3\sqrt{5}$	2	M1 for $\sqrt{6^2 + 3^2}$ or better or M1 for $a = 5$