

MATH141 - Worksheet

GEOMETRY - Answers

1. (a) $2\sqrt{5}$, (3, 3), 2 (b) $\sqrt{5}$, $(4, \frac{3}{2})$, $-\frac{1}{2}$ (c) $\sqrt{26}$, $(\frac{1}{2}, \frac{7}{2})$, $-\frac{1}{5}$ (d) $2\sqrt{5}$, (1, 3), $\frac{1}{2}$
(e) $2\sqrt{5}$, (2, -2), $-\frac{1}{2}$ (f) 2, (2, 5), 0 (g) $3\sqrt{5}$, $(\frac{7}{2}, 1)$, -2 (h) 4, (4, 5), undefined
2. (a) $y = 2x + 5$ (b) $y = \frac{1}{2}x - 3$ (c) $y = -3x + 4$
(d) $y = \frac{1}{3}x + 4$ (e) $3x - y + 1 = 0$ (f) $2x - y - 3 = 0$
(g) $y + 2x - 4 = 0$ (h) $2x - y - 12 = 0$ (i) $x - y - 2 = 0$
(j) $x + y - 5 = 0$ (k) $x - 3y - 8 = 0$
3. (a) $y = 2x + 1$; $y = -\frac{1}{2}x + 1$ (b) $3x + y - 6 = 0$; $x - 3y + 8 = 0$
(c) $x + y - 6 = 0$; $x - y + 2 = 0$ (d) $y = \frac{1}{2}x + 3$; $y = -2x + 3$
4. (a) circle (b) hyperbola (c) exponential (d) straight line
(e) parabola (f) straight line (g) semi-circle (h) logarithm
(i) hyperbola (j) straight line (k) circle (l) parabola