

Reflection Work

Using the technique from last lesson, reflect the specified points in the stated line. Fold the answers away and only look once you think you've got the answer. Finish this (and not the Olympiad paper) for prep (as much as you can; I am aware it is rather horrid with the algebraic ones).

1. Reflect the point $(3, 4)$ in the line $x = 0$. $(-3, 4)$
2. Reflect the point $(2, 5)$ in the line $y = 0$. $(2, -5)$
3. Reflect the point $(-2, 5)$ in the line $x = 1$. $(4, 5)$
4. Reflect the point $(0, 0)$ in the line $y = k$. $(0, 2k)$
5. Reflect the point (a, b) in the line $x = 4$.
6. Reflect the point (c, d) in the line $y = d$.
7. Reflect the point $(1, -2)$ in the line $y = x$. $(-2, 1)$
8. Reflect the point (a, b) in the line $y = x$. (b, a)
9. Reflect the point (a, b) in the line $y = -x$. $(-b, -a)$
10. Reflect the point $(3, 2)$ in the line $y = x + 2$. $(0, 5)$
11. Reflect the point $(-2, 1)$ in the line $y = x - 5$. $(6, -7)$
12. Reflect the point $(\frac{1}{2}, 4)$ in the line $y = -x + 3$. $(-1, \frac{5}{2})$
13. Reflect the point $(9, b)$ in the line $y = x + 3$.
14. Reflect the point (a, b) in the line $y = x + c$.
15. Reflect the point $(6, -1)$ in the line $y = 2x$. $(-\frac{22}{5}, \frac{21}{5})$
16. Reflect the point $(8, 1)$ in the line $y = -2x + 5$. $(-\frac{8}{5}, -\frac{19}{5})$
17. Reflect the point (a, b) in the line $y = 3x + 1$.
18. Reflect the point (a, b) in the line $y = mx + c$.