

Name: _____

M3.A.REI.B.3 – Systems: $f(x) = g(x)$

For the following problems, identify the x-values where $f(x) = g(x)$ **graphically** (using technology).

1. $f(x) = -x^2 - 10x - 15$ $g(x) = 2x^2 + x - 9$	2. $f(x) = x^3 - 3x^2 - 34x - 48$ $g(x) = \frac{1}{4}x^2 + 2x - 5$
3. $f(x) = 2^x - 5$ $g(x) = 2x - 3$	4. $f(x) = \sqrt{x + 5}$ $g(x) = \frac{1}{5}x + 2$
5. $f(x) = x + 2 - 5$ $g(x) = -x + 7$	6. $f(x) = \sqrt{x + 5} - 5$ $g(x) = -2 x - 1 + 3$
7. $f(x) = x + 2$ $g(x) = x^2 - 4$	8. $f(x) = 2^x - 3$ $g(x) = -\frac{1}{2}x + 5$