Math 2
Unit 2B Quiz Review
Name $\qquad$
Show your work for all problems.
Solve the following by factoring.

| 1) | $x^{2}+6 x+8=0$ |  | 2) | $x^{2}-13 x=x-45$ |
| :--- | :--- | :--- | :--- | :--- |
| $x=-2$ | $x=-4$ | $x=9$ | $x=5$ |  |
| 3$)$ | $7 x^{2}+14 x-245=0$ | $4)$ | $8 x^{2}=48 x$ |  |
|  | $x=-7 \quad x=5$ | $x=0 \quad x=6$ |  |  |
|  |  |  |  |  |

Solve the following using the square root method. Be sure to simplify all radicals.

| 5$)$ | $x^{2}-17=1$ | $6)$ | $25 x^{2}+4=53$ |
| :--- | :--- | :--- | :--- |
| $x= \pm 3 \sqrt{2}$ | $x= \pm \frac{7}{5}$ |  |  |

Solve the following by graphing. Be sure to identify the solution.
7) $x^{2}-10 x+21=0$

8)

$x=-4$

Solve the following using the quadratic formula. Be sure to simplify all radicals.

| 9) | $-2 x^{2}+12 x+14=0$ | 10) | $x^{2}+6 x+14=0$ |
| :--- | :--- | :--- | :--- |
| $x=7$ | $x=-1$ | $x=-3 \pm i \sqrt{5}$ |  |

