Solve each quadratic equation by factoring. Make sure to write each in standard form if needed.

| Solve each quadratic equation by factoring. Make sure to write each in standard form if needed. |  |
| :--- | :--- | :--- |
| 1. $2 x^{2}-12 x+32=x^{2}$ | 5. $x^{2}-x=42$ |
| 2. $x^{2}-3 x-18=0$ | 6. $x^{2}-5 x+33=7 x-3$ |
| 3. $x-56=-x^{2}$ | 7. $9 x^{2}-10 x=x^{2}+4 x$ |
| 4. $12 x^{2}+13 x=5 x$ | $8.3 x^{2}-15 x$ |


| TUESDAY |  |
| :---: | :---: |
| Simplify the following. Simplify each radical, if necessary. <br> **You should have 2 answers! $\begin{gathered} 5 \pm 7 \\ -4 \pm \sqrt{9} \\ 6 \pm \sqrt{18} \end{gathered}$ | Solve by factoring. $x^{2}-14=5 x$ <br> Solve by factoring. $9 x^{2}-3 x-2=0$ |
| Factor the following trinomials. Then, write the answers in the form: $(a+b)^{2}$ $\begin{aligned} & x^{2}-10 x+25 \\ & x^{2}+14 x+49 \end{aligned}$ | Explain the pattern for the problems on the left. |

$\qquad$

| WEDNESDAY |  |
| :---: | :---: |
| Solve each equation for $x$. $x-3= \pm 5$ | Solve by taking square roots. $4 x^{2}-1=24$ |
| $x+2= \pm \sqrt{3}$ | Solve by taking square roots. Leave in fraction form. $9 x^{2}=25$ |
| $x-6= \pm 12$ |  |
| Solve by taking square roots. Leave in fraction form. $-4 x^{2}=-25$ | Solve by taking square roots. $2 x^{2}=14$ |
| Solve by taking square roots. $x^{2}+13=4$ | Solve by taking square roots. $x^{2}-61=20$ |


| THURSDAY |  |
| :---: | :---: |
| Solve by taking square roots. $6(x+2)^{2}=24$ | Solve by taking square roots. $(x+8)^{2}=6$ |
| Solve by taking square roots. $3(x+6)^{2}=27$ | Solve by taking square roots. $3(x-1)^{2}=243$ |
| Solve by taking square roots. $-(x+2)^{2}=9$ | Solve by taking square roots. $2(x+4)^{2}=50$ |
| Solve by taking square roots. $2(x-7)^{2}=18$ | Solve by taking square roots. $(x+22)^{2}=625$ |

