| Solving Quadratics by <br> Factoring WS_1 | Period (circle one): 5 7 | Date: | Name: |
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Solve each quadratic

1. $x^{2}-5 x-6=0$
2. $x^{2}+5 x-24=12$
3. $x^{2}-28 x+75=0$
4. $x^{2}+15 x+32=-3 x$
5. $5 x^{3}-19 x^{2}+12 x=0$
6. $6 x^{2}-4 x-4=12$
7. $6 x^{2}+17 x+11=0$
8. Lupe has a rectangular garden. The length of the garden is 2 ft . less than three times its width
a. Write two variable expressions for the dimensions of the garden

Length:

Width:
b. If you were told that the area of the garden is $96 \mathrm{ft}^{2}$, how could you figure out what the dimensions of the garden are in feet? Explain your steps; describe what you know and how you can then use that information to figure out the actual dimensions of the garden.
c. What are the actual dimensions of the garden?

