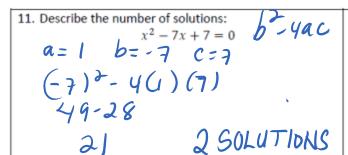
7. Algebra 1: Quadratic Ed	MRS.WILSON
1. Simplify √81	2. Simplify $\sqrt{\frac{16}{121}}$
3. Solve: $4x^{2}-64=0 \\ +64+64$ $4x^{2}-64=0$ $464+64$ $4x^{2}-64=0$	4. Solve: $5x^{2} + 10 = 135$ $-10 - 10$ $5x^{2} - 125$ 5 5 1 1 2 5 5 1 5 5 5 1 5 5 5 5 5 5 5 5 5 5
5. Solve for x.	6. Solve for x. $(x+4)^{2}+4=40$ $-y-y$ $(x+4)^{2}=36$ $x+y=-6$ $-y-y-y$ $x=2$ $x=-10$ 8. Solve for x. $x^{2}+7x-8=0$ $x+8=0$ $-8-8$ $x=1$ $x=-8$ $x=1$ $x=-8$ $x=1$ $x=-8$ $x=1$
9. Solve for x. $ \frac{-9 \cdot 16/-2}{3 \times 1/3 \times} $ $ 3x^{2} - 11x + 6 = 0 $ $ 3 \times -2 = 0 $ $ 12 \cdot 12 $ $ 3 \times -9 = 0 $ $ +9 \cdot 19 $ $ 3 \times -9 = 0 $ $ 7 \times -9 = 0 $	10. Solve for x. $3x^{2} - 75 = 0$ $-17 < 175$ $3 \times 2 = 75$ $3 \times 2 = 75$ $\sqrt{2} = 25$ $\sqrt{2} = 25$ $\sqrt{2} = 5$

55 This X=73

X=±5

Delano High School Page 29 Algebra 1



- 12. Describe the number of solutions: $b^2 4aC$ $a = 1 \quad b = 8 \quad C = 16$ $8^2 4(1)(46)$ 64 64 0 1 = 50 MeV
- Solve by completing the square. Fill in Step 2 and Step 3.

	$x^2 - 14x - 15 = 0$
Step 1	$x^2 - 14x + 49 = +15 + 49$
Step 2	$(\cancel{X} - \cancel{2})^2 = \cancel{6}\cancel{4}$
Step 3	<u> </u>
Step 4	x = -1 and $x = 15$

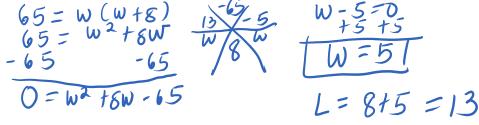
Solve by using the quadratic formula. Fill in Step 2.

$x^2 + 6x - 6 = 0$		
Step 1	$-(6) \pm \sqrt{(6)^2 - 4(1)(6)}$	
	$\chi = \frac{1}{1}$	
	2(1)	
Step 2	$-6 \pm \sqrt{8(1) + (24)}$	
	-0 I \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	χ =	
	2	
Cton 2	6.1. [60	
Step 3	$-6 \pm \sqrt{60}$	
	Y =	
	~ 2	

Free Response

15. A model rocket is fired vertically into the air at $54 \, m/s$. The expression $-9t^2 + 54t$ gives the rocket's height after t seconds. Find the number of seconds it takes for the rocket to reach the ground. h = 0

16. A landscaper is designing a rectangular brick patio. She has enough bricks to cover 65 square feet. She wants the length of the patio to be 8 feet longer than the width. What dimensions should she use for the patio?



17. An artist is working on a rectangular painting with a length that is 4 inches longer than its width. The area of the painting is 60 square inches. What is the length and width of the painting?

