

I. Analyze the work shown. Explain the error that was made. Rework the problem correctly in the right column.

1. Solve $2x^2 + 7x - 4 = 0$	
$(2x - 1)(x + 4) = 0$	
$x = 1$ and $x = -4$	

Explanation:

2. Solve $5x^2 + 5x - 60 = 0$	
$5(x^2 + x - 12) = 0$	
$5(x + 4)(x - 3) = 0$	
$x = 5$ and $x = -4$ and $x = 3$	

Explanation:

3. Solve by Square Root: $3x^2 - 2 = 13$	
$3x^2 = 15$	
$x^2 = 5$	
$x = \sqrt{5}$	

Explanation:

4. Solve by Square Root: $7 - x^2 = 16$	
$-x^2 = 9$	
$x^2 = -9$	
$x = \pm 3$	

Explanation:

5. Solve by Square Root: $(x - 6)^2 = 49$	
$x - 6 = 7$	
$x = \pm 13$	

Explanation:

II. Solve each quadratic equation by factoring or by square root. Simplify if necessary to give the EXACT solution(s).

6. $x^2 + 20x = -100$

7. $6x^2 - 28 = 2x$

8. $-x^2 + 6 = 24$

9. $30x^2 = -48x$

10. $(7x - 2)^2 - 5 = 20$

11. $-3x^2 - 10x - 7 = 0$

12. $8x^2 = 48$

13. $(2x + 1)(2x + 1) = 0$

14. $\frac{1}{3}(x - 1)^2 = -15$