

4-6 Solving Equations by Completing the Square Notes

Notes:

Problem	$2x^2 + 11x - 23 = -x + 3$
Simplify and get only terms with "x" on the left.	
Make sure "x ² " coefficient is 1. If not, divide.	
Divide the linear coefficient by 2. (Remember this magic number for factoring step.) Square it, and add it to both sides. Magic Number = _____	
Factor the left (using the magic number) and simplify the right.	
Solve for "x" and be sure the answer is simplified.	

Problem	$3x^2 - 42x + 78 = 0$
Simplify and get only terms with "x" on the left.	
Make sure "x ² " coefficient is 1. If not, divide.	
Divide the linear coefficient by 2. (Remember this magic number for factoring step.) Square it, and add it to both sides. Magic Number = _____	
Factor the left (using the magic number) and simplify the right.	
Solve for "x" and be sure the answer is simplified.	

Problem	$x^2 - 18x + 64 = 0$
Simplify and get only terms with "x" on the left.	
Make sure "x ² " coefficient is 1. If not, divide.	
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