

YOUR NAME: _____

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Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Solve the equation $x^3 - 2x^2 - x + 2 = 0$.
2. Jim and Jane have a master bedroom that is 240 square feet in area. They are planning to restructure the house and they figured that, if they increase the width by 3 feet, then they must decrease the length by 4 feet in order to keep the area unchanged. What are the original dimensions of their bedroom?