8-1 Adding & Subtracting Polynomials

1. Classify the polynomial $4x^3 - 2$ as indicated:

   a. by degree: | Cubic |

   b. by number of terms: | binomial |

2. Give an example of a **quadratic trinomial**.

   answer will vary

3. Find each sum or difference. Express your answer in standard form.

   a. $(5x - 8x^2) + (x - 6)$

   $5x - 8x^2 + x - 6$

   $\boxed{-8x^2 + 6x - 6}$

   b. $(4x - 2 - 5x^2) - (3 + x^2 - 4x^3)$

   $4x - 2 - 5x^2 - 3 - x^2 + 4x^3$

   $\boxed{4x^3 - 6x^2 + 4x - 5}$