

Please do not write in the margins of the page!

Show all of your work on this paper: you are being graded on your work. No other paper may be used during this quiz.

- 1) Verify that -2 is a root of the polynomial $p(x)$, and use that information to find all the roots, and then write the complete factorization of $p(x)$:

$$p(x) = x^3 - x^2 - 16x - 20$$

Roots of $p(x)$:

Factorization of $p(x)$:

- 2) Verify that 5 is a root of the polynomial $p(x)$, and use that information to find all the roots, and then write the complete factorization of $p(x)$:

$$p(x) = x^3 - 5x^2 - 7x + 35$$

Roots of $p(x)$:

Factorization of $p(x)$: