1. Write each polynomial in standard form. Then classify according to degree and number of terms.
A. $s^{2}\left(s^{4}+3 s-2\right)-\left(4 s^{5}+9 s+2\right)$
B. $\left(8 m^{4}-2 m^{3} b^{2}+10 m b^{2}\right)-\left(4 m^{3} b^{2}+8 m^{4}\right)$
2. Factor each polynomial completely. Then state the zeros, as well as their multiplicity.
A. $x^{4}(x+3)^{5}-81(x+3)^{5}$
B. $3 x^{3}-6 x^{2}-16 x$
3. Write a polynomial in factored form and standard form with integer coefficients that has zeros as stated. A
A. Zeros: $i(M .1), 3 / 5$ (M.2)
B. Zeros: $-1 / 2$ (M.1) and -7 (M.3)

## Polynomials Quick Quiz Review Problems

1. Write each polynomial in standard form. Then classify according to degree and number of terms.
A. $s^{2}\left(s^{4}+3 s-2\right)-\left(4 s^{5}+9 s+2\right)$
B. $\left(8 m^{4}-2 m^{3} b^{2}+10 m b^{2}\right)-\left(4 m^{3} b^{2}+8 m^{4}\right)$
2. Factor each polynomial completely. Then state the zeros, as well as their multiplicity.
A. $x^{4}(x+3)^{5}-81(x+3)^{5}$
B. $3 x^{3}-6 x^{2}-16 x$
3. Write a polynomial in factored form and standard form with integer coefficients that has zeros as stated. A
A. Zeros: $i(M .1), 3 / 5$ (M.2)
B. Zeros: $-1 / 2$ (M.1) and -7 (M.3)
