IB Math Pre HL 6D Zeros, Roots, and Factors

1. Find a cubic polynomial in standard form that has zeros  , .

2. Find all quartic polynomials with real

coefficients that have zeros 4 and .

IB Pre HL Rational Roots Theorem Practice WS Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| List all possible rational zeros of each function. Then determine which, if any, are zeros. | | | | | | | |
| 1. |  | 2. |  | | | 3. |  |
| Write a polynomial function of least degree with real coefficients in standard form that has the given zeros: | | | | | | | |
| 4. |  | 5. |  | | | 6. |  |
| Write the polynomial as the product of linear factors. The provided graphs may help you more efficiently factor. | | | | | | | |
| 7. |  | | | 8. |  | | |