

# Math 1513 - College Algebra

## Discussion Board Week 9 - Due 2012.03.10

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Find all rational zeroes of the functions given and use them to write the function in factored form. Be sure to state all possible rational roots that you have to test for, highlighting the ones that are indeed roots.

1.  $f(x) = 6x^3 + 7x^2 - 61x + 28$

2.  $f(x) = 5x^3 - 27x^2 - 20x + 12$

3.  $f(x) = 10x^3 + 82x^2 + 108x - 144$

4.  $f(x) = -15x^3 - 17x^2 + 24x - 4$

5.  $f(x) = -6x^3 + 35x^2 - 37x - 42$

6.  $f(x) = 18x^3 + 97x^2 + 115x - 14$

7.  $f(x) = 3x^3 - 5x^2 - 64x - 84$

8.  $f(x) = 21x^3 + 73x^2 + 20x - 84$

9.  $f(x) = 3x^3 + 5x^2 - 124x - 84$

10.  $f(x) = 12x^3 + 9x^2 - 27x + 6$

11.  $f(x) = 8x^3 - 6x^2 - 17x + 15$

12.  $f(x) = 2x^3 - 21x^2 + 7x + 30$

13.  $f(x) = 6x^3 - 47x^2 + 29x + 42$

14.  $f(x) = 4x^3 - 4x^2 - 23x + 30$

15.  $f(x) = 4x^3 + 8x^2 - 25x - 50$

16.  $f(x) = 12x^3 - 4x^2 - 31x + 15$

17.  $f(x) = 6x^3 - 11x^2 - 26x + 15$

18.  $f(x) = 24x^3 + 55x^2 + 16x - 15$

19.  $f(x) = 16x^3 + 18x^2 - x - 3$

20.  $f(x) = 16x^3 + 102x^2 + 117x + 35$

21.  $f(x) = 6x^3 + 49x^2 + 88x - 35$

22.  $f(x) = 18x^3 + 15x^2 - x - 2$

23.  $f(x) = 18x^3 + 33x^2 + 2x - 5$

24.  $f(x) = 9x^3 + 66x^2 + 67x - 30$

25.  $f(x) = 9x^3 + 3x^2 - 17x + 5$