

Partial Fractions Problems

Sketch the graph of each function, using the methods discussed in class.

1. $f(x) = x^3 + 4x^2 - 9x - 36$

2. $f(x) = x^4 - 3x^3 - 4x^2 + 12x$ *Hint: When finding the x-intercepts, first factor out 'x' then factor by grouping.*

3. $f(x) = (-x + 2)(x + 4)(x - 5)(x + 1)$

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

5. $f(x) = x^2(x + 2)(-x + 4)$

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