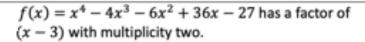
rewrite f(x) in factored form and find all zeros. Then sketch the graph. Show all work.



The **fully factored form** of f(x) is:

The **zeros** are:

The x-intercepts are:

The *y-intercept* of the polynomial is

: The **end behavior** of the polynomial is...

if
$$x \to \infty$$
 then $y \to$ _____

if
$$x \to -\infty$$
 then $y \to \underline{\hspace{1cm}}$

$$f(x) = 2x^3 - 3x^2 - 14x + 15$$
 has factors of $(x-1)$ and $(x-3)$.

The **fully factored form** of f(x) is:

The **zeros** are:

The *x-intercepts* are:

The *y-intercept* of the polynomial is

: The **end behavior** of the polynomial is...

if
$$x \to \infty$$
 then $y \to$ _____

if
$$x \to -\infty$$
 then $y \to \underline{\hspace{1cm}}$

$$f(x) = -x^5 + 7x^4 - 9x^3 - 27x^2 + 54x$$
 has a factor of $(x-3)$ with multiplicity 3.

The *fully factored form* of f(x) is:

The **zeros** are:

The *x-intercepts* are:

The *y-intercept* of the polynomial is

: The *end behavior* of the polynomial is...

if
$$x \to \infty$$
 then $y \to$

if
$$x \to -\infty$$
 then $y \to \underline{\hspace{1cm}}$