

9.  $f(x) = x^3 - 27x$   $[0, 5]$

①  $f'(x) = 3x^2 - 27$

②  $3x^2 - 27 = 0$

$$3x^2 = 27$$

$$x^2 = 9$$

$$x = \pm \sqrt{9}$$

$$x = \pm 3$$

~~$x = -3$~~   $x = 3$

③

$x = 0$

$$y = x^3 - 27x$$

$$y = 0$$

$x = 3$

$$y = x^3 - 27x$$

$$y = -54$$

$x = 5$

$$y = x^3 - 27x$$

$$y = -10$$

Abs min:  $(3, -54)$

Abs max:  $(0, 0)$