grafik çizme
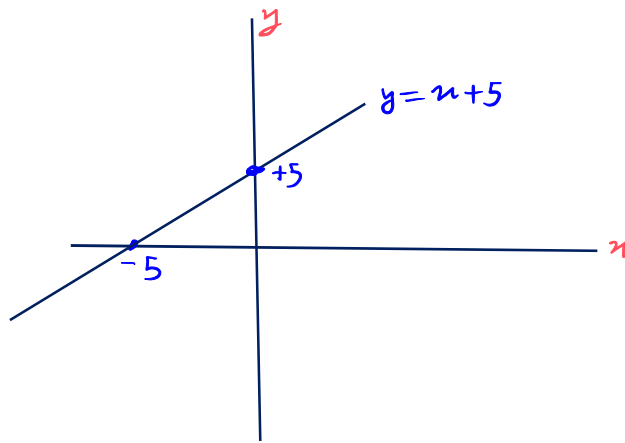
1. denklem:

$y = x + 5$

$y = 0 \Rightarrow x = -5$

$x = 0 \Rightarrow y = 5$

parabol: $y = ax^2 + bx + c$

① $a > 0$ ∪

  $a < 0$ ∩

② $x = 0$ için $y = ?$

  $y = 0$ için $x = ?$

③ $T(r, k) = r = \dfrac{-b}{2a}$, $k = f(r)$

$y = x^2 + 8x + 7$
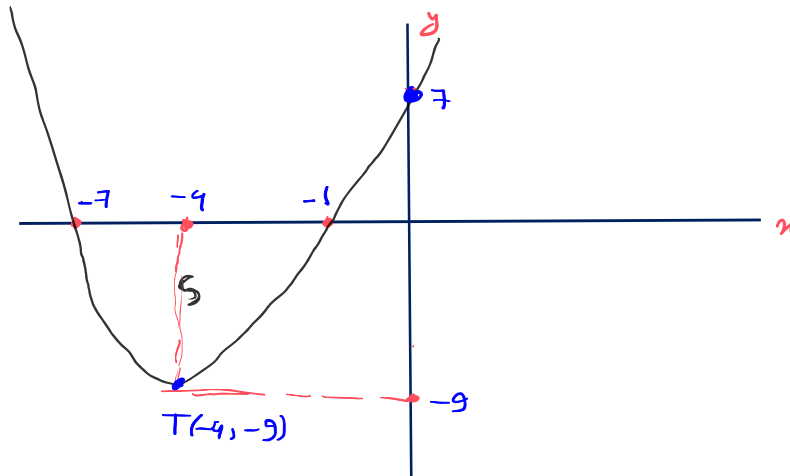
1) $a = 1 > 0$ ∪

2) $x = 0$ için $y = 7$

   $y = 0$ için $0 = (x + 7)(x + 1)$

   $x = -1, -7$

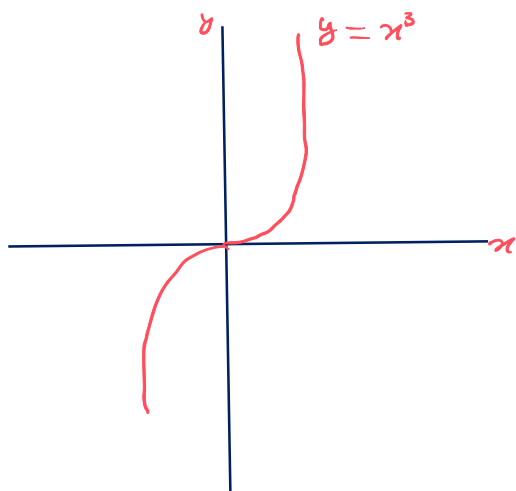3) $r = \dfrac{-b}{2a} = \dfrac{-8}{2} = -4$, $f(-4) = 16 - 32 + 7 = -9$
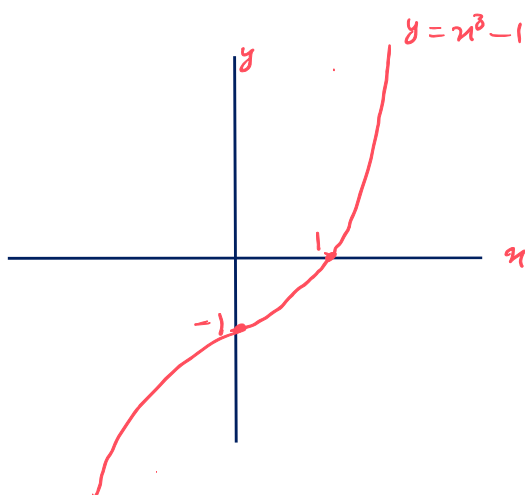
   $T(-4, -9)$

$T(-4, -9)$

3. denklem

$y = x^3$

$y = 0 \Rightarrow x = 0$

$y = x^3$

$y = x^3 - 1$
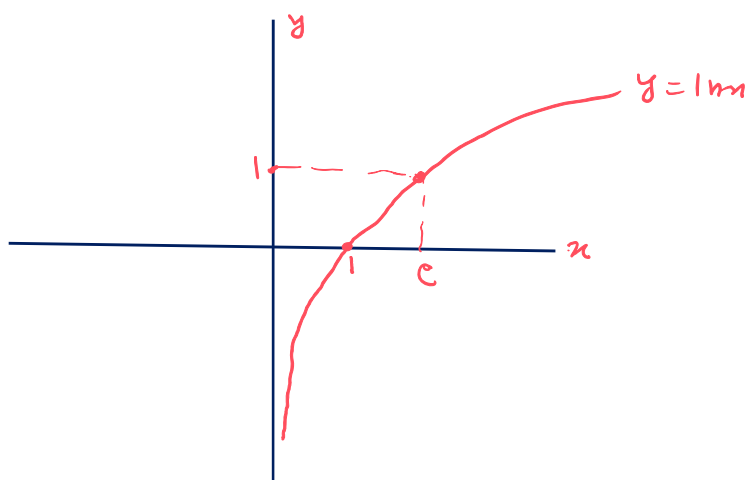
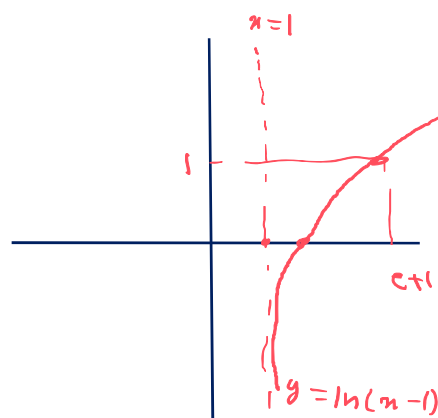$y = 0 \Rightarrow x = 1$

$x = 0 \Rightarrow y = -1$

$y = x^3 - 1$

$y = \ln x$

1) $x > 0$

2) $y = 0$ için $x = 1$

3) $y = 1$ için $x = e$

$y = \ln x$

$e \simeq 2,7$

$y = \ln(x-1)$

1) $x - 1 > 0$

$x > 1 \longrightarrow$ Asimptot Dikey

2) $y = 0 \Rightarrow$ için $e^0 = x - 1$

$1 = x - 1 \Rightarrow x = 2$
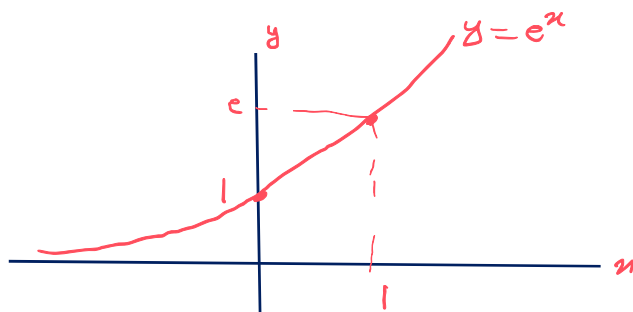
3) $y = 1 \Rightarrow e = x - 1 \Rightarrow x = e + 1$

$x = 1$
$e + 1$
$y = \ln(x-1)$

$y = e^x$

$\ln y = x \qquad y > 0$

$\qquad x = 0 \Rightarrow y = 1$

$\qquad x = 1 \Rightarrow y = e$

$y = \dfrac{1}{x-1} \qquad x - 1 \neq 0$

$\qquad\qquad x \neq 1$

$x = 2 \longrightarrow y = 1$

$x = 3 \longrightarrow y = \dfrac{1}{2}$

$x = 4 \longrightarrow y = \dfrac{1}{3}$

$x^2 + y^2 = r^2$

$(0, 0)$