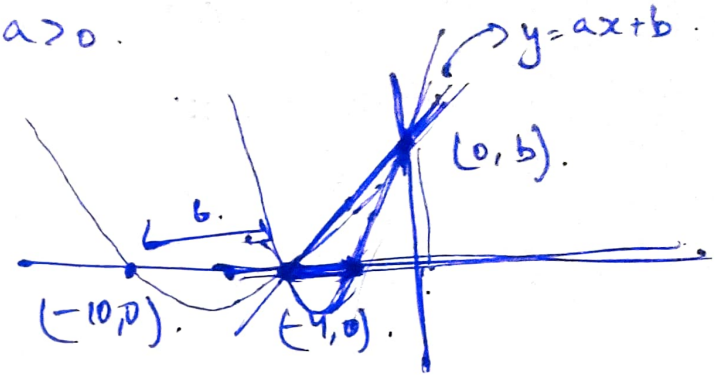
2.) $y = ax + b$, $a > 0$.



$-4a = -b$.

$\boxed{4a = b}$

as, $a > 0$

$b > 0$. → +ve intercept on y-axis.

~~$b^2 - 4ac > 0$~~

As 6 units apart → $(-10, 0)$ is point on curve.

So, curve is $y = (x + 10)(x + 4)$

$y = $ ~~$x^2 + 40x +$~~ $x^2 + 14x + 40$

At $x = 0$

$y = 40$.

$b = 40$.

$a = 10$

$\boxed{a + b = 50}$