PAG. 250 N 3

$F\left(0, \frac{1}{3}\right)$ f $d: y = -\frac{1}{3}$

$y = ax^2$ $\qquad a = \frac{1}{4f} = \frac{1}{4 \cdot \frac{1}{3}} = \frac{3}{4}$

$$y = \frac{3}{4}x^2$$

N 6

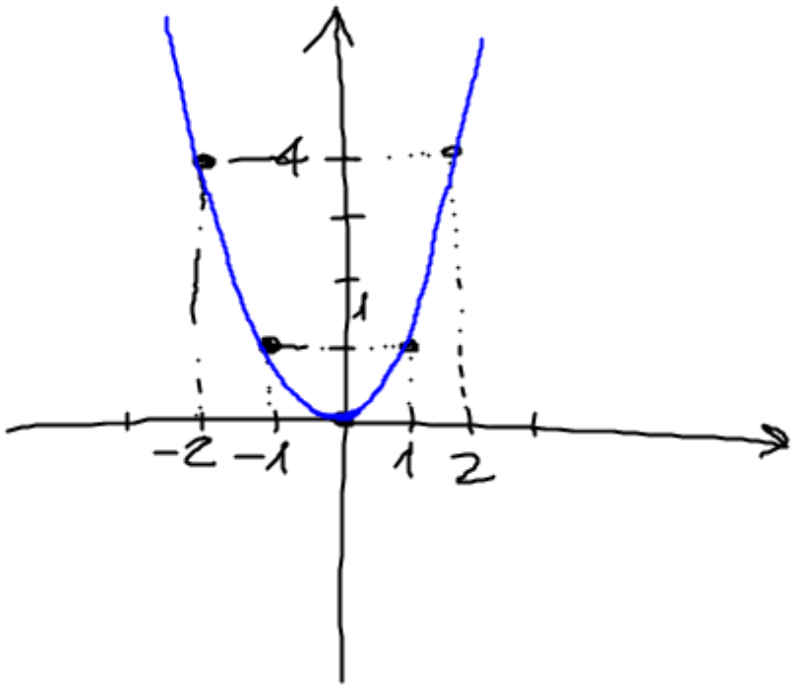
$d: y = \frac{3}{2}$ $\qquad F\left(0, -\frac{3}{2}\right)$ $\qquad f = -\frac{3}{2}$

$$a = \frac{1}{4f} = \frac{1}{4 \cdot \left(-\frac{3}{2}\right)} = -\frac{1}{6}$$

$$y = -\frac{1}{6}x^2$$

$F\left(0, \frac{1}{4}\right)$ $\quad a = \frac{1}{4 \cdot \frac{1}{4}} = 1$

$$\boxed{y = x^2}$$



x	y
0	0
1	1
-1	1
2	4
-2	4

PAG. 251 N8

$$d: y = \frac{4}{3} \Rightarrow F\left(0, -\frac{4}{3}\right)$$

$$a = \frac{1}{4f} = \frac{1}{4 \cdot \left(-\frac{4}{3}\right)} = -\frac{3}{16}$$

$$\Updownarrow$$

$$f = \frac{1}{4a}$$

$$\boxed{y = -\frac{3}{16}x^2}$$

N 10

$y = \frac{3}{2}x^2$

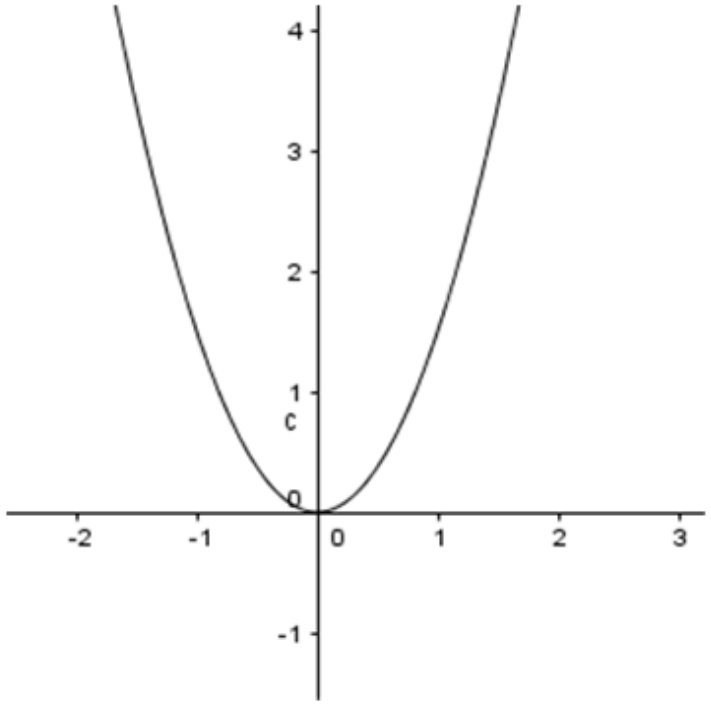
$f = \frac{1}{4a} = \frac{1}{4 \cdot \frac{3}{2}} = \frac{1}{6}$

VERTICE $V(0,0)$

ASSE $x = 0$ (ASSE y)

FUOCO $F\left(0, \frac{1}{6}\right)$

DIRETTRICE $y = -\frac{1}{6}$



N 11 $y = -\frac{5}{8}x^2$

$V(0,0)$

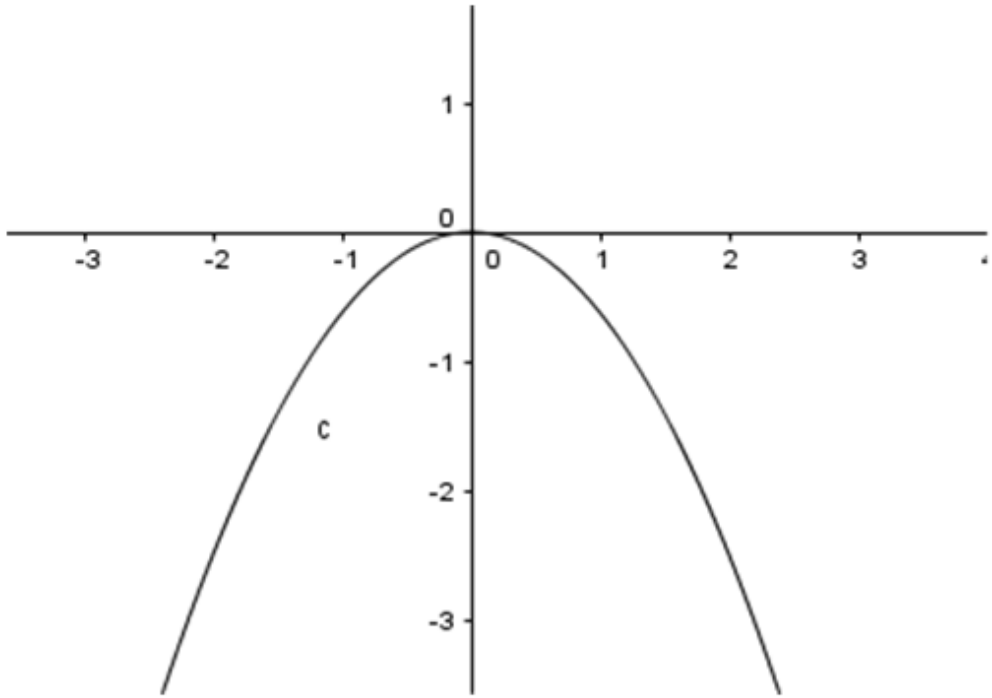
ASSE $x = 0$

$f = \frac{1}{4a} = \frac{1}{4 \cdot \left(-\frac{5}{8}\right)} =$

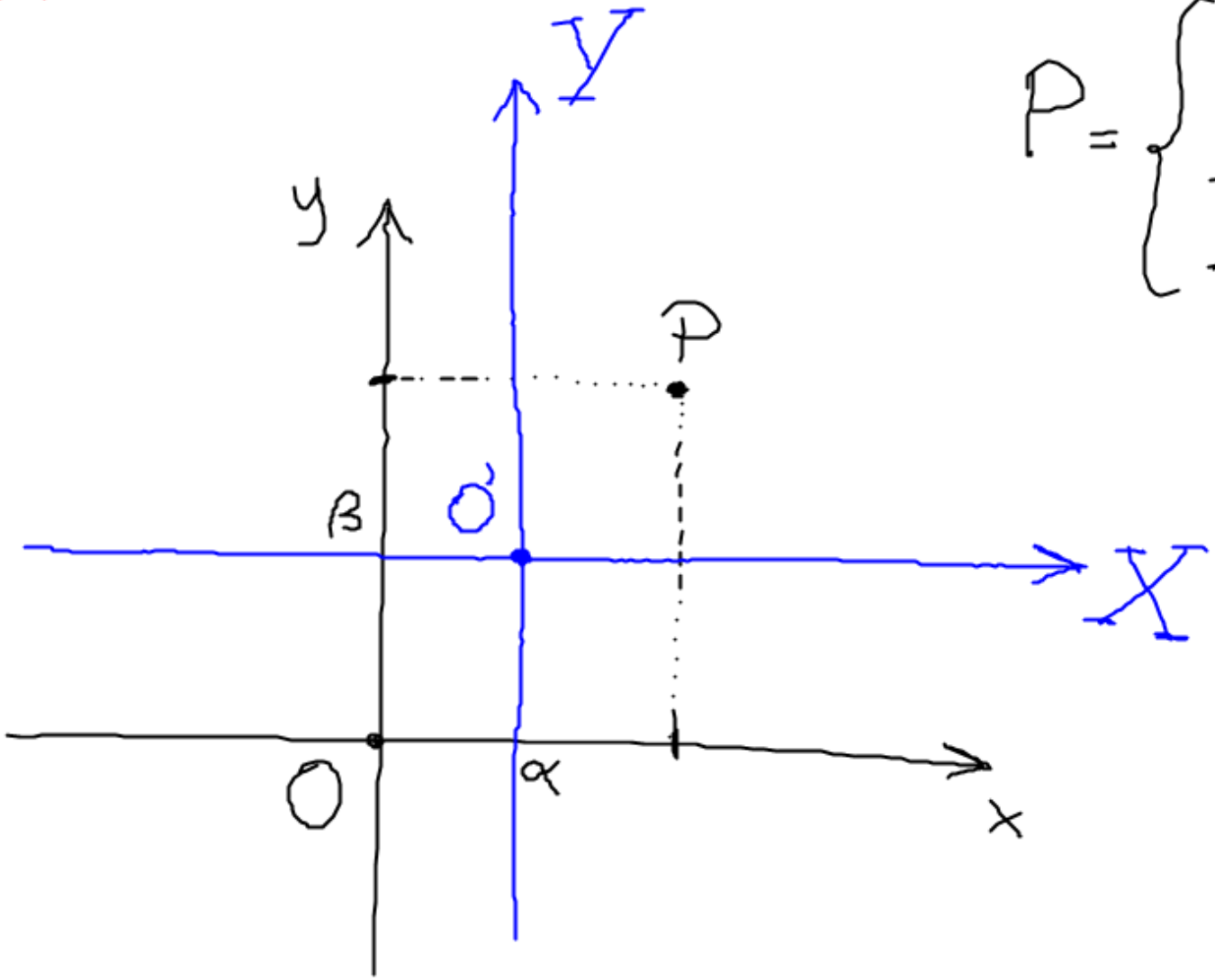
$= -\frac{2}{5}$

$F\left(0, -\frac{2}{5}\right)$

$d: \; y = \frac{2}{5}$

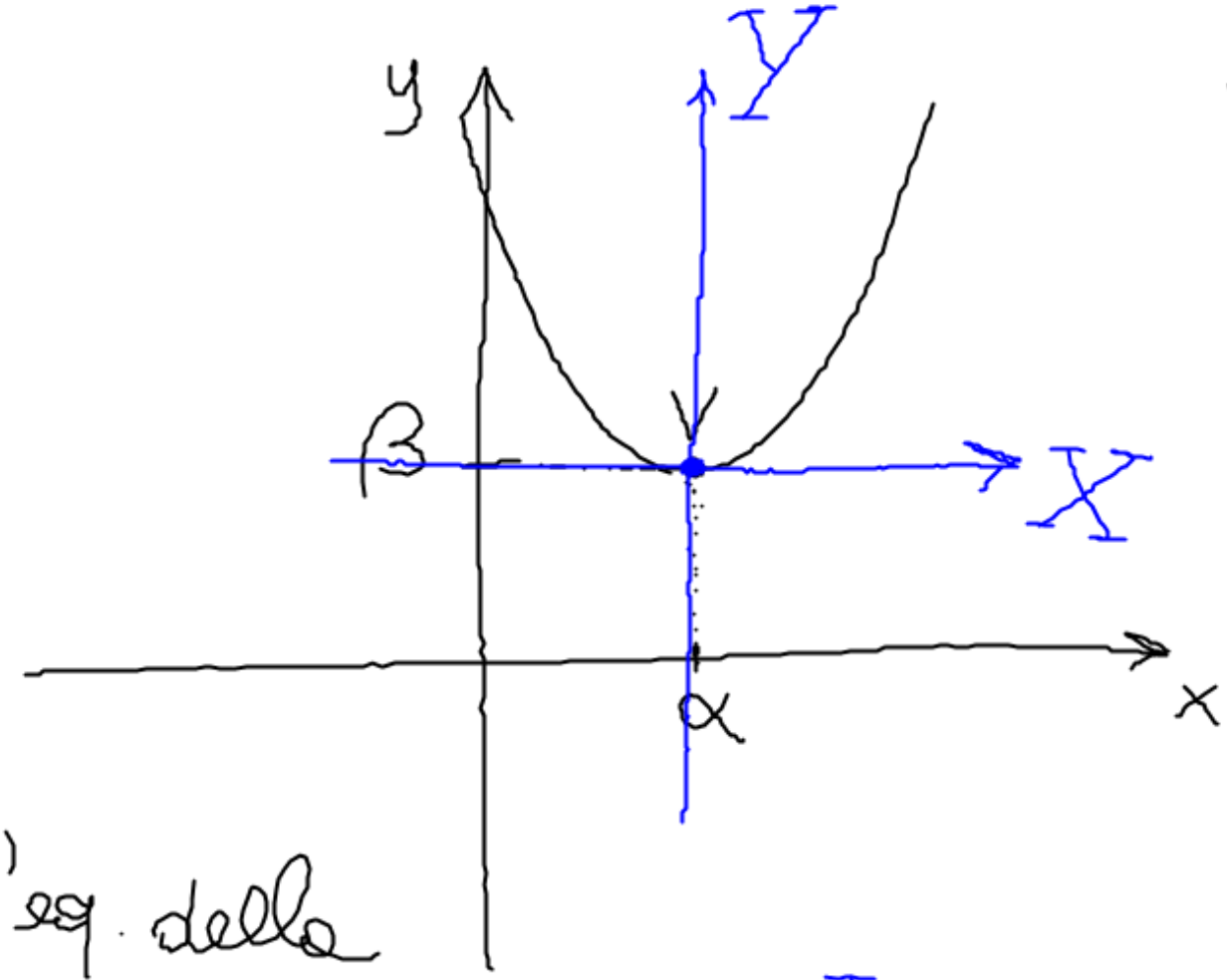


PREMESSA



$$P = \begin{cases} X = x - \alpha \\ Y = y - \beta \end{cases}$$

OBIETTIVO = Trovare l'equazione della parabola nel sistema di rif. xy



L'eq. della parabola nel sistema di rif. XY è $Y = aX^2$

$$Y = a X^2$$

$$\begin{cases} X = x - \alpha \\ Y = y - \beta \end{cases}$$