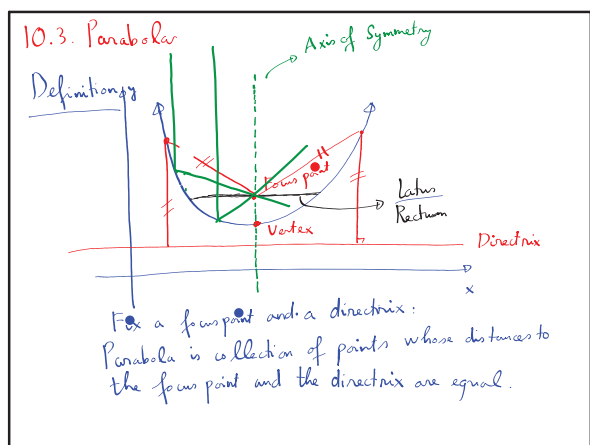
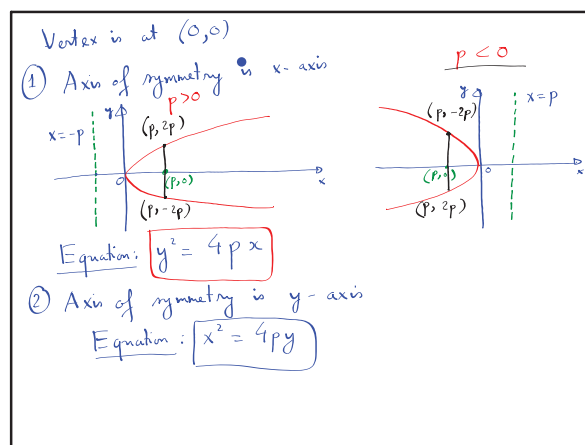
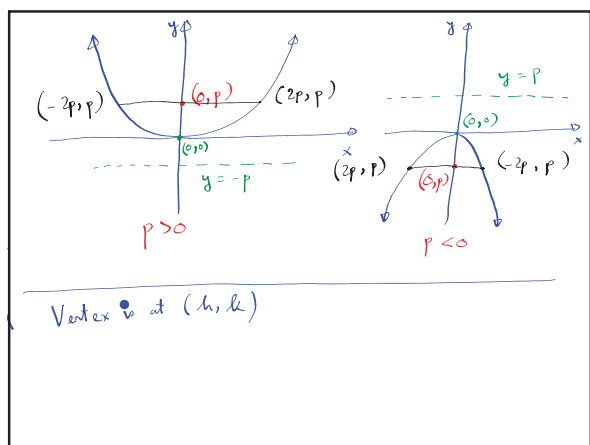




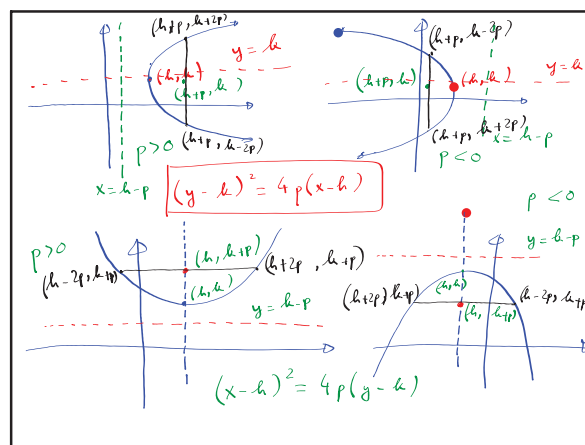
Nov 2-6:01 PM



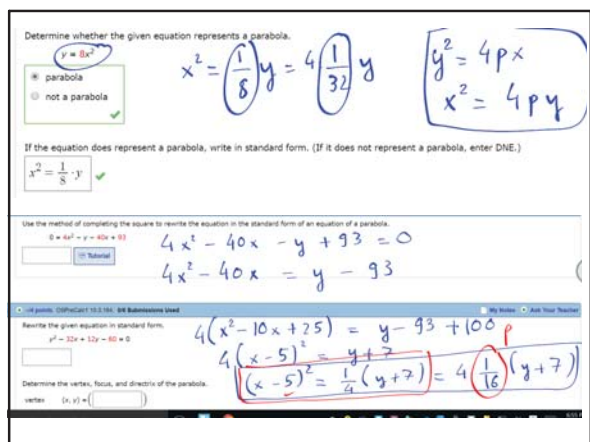
Nov 2-6:08 PM



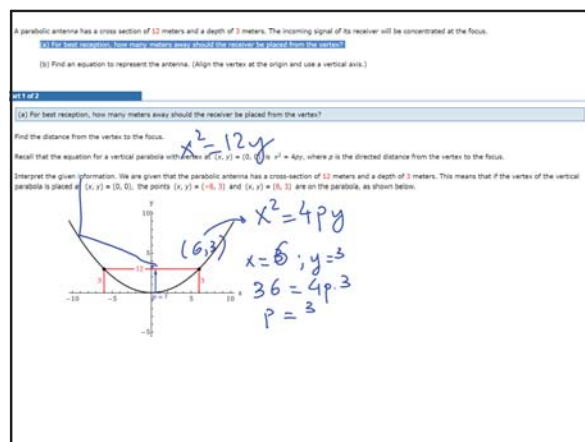
Nov 2-6:13 PM



Nov 2-6:16 PM



Nov 2-7:17 PM



Nov 2-7:42 PM

Write the equation for the hyperbola in standard form.

$$4x^2 - 6x - 9y^2 + 8y = -144$$

Identify the vertices and foci.

vertices: $(x, y) = (\quad, \quad)$ (smaller y-value)
 $(x, y) = (\quad, \quad)$ (larger y-value)

foci: $(x, y) = (\quad, \quad)$ (smaller y-value)
 $(x, y) = (\quad, \quad)$ (larger y-value)

Write equations of the asymptotes. (Enter your answers as a comma-separated list of equations.)

Additional Materials

- Lesson
- Core Sections: The Hyperbola Part 2 of 2
- Graph a Hyperbola with Center not at Origin

Handwritten work:

$$4(x^2 - 6x) - 9(y^2 + 8y) = -144$$

$$4(x^2 - 6x + 9) - 9(y^2 + 8y + 16) = -144 + 36 - 144$$

$$\frac{4(x-3)^2}{-252} - \frac{9(y+4)^2}{-252} = -252$$

$$-\frac{(x-3)^2}{63} + \frac{(y+4)^2}{28} = 1$$

$$\frac{(y+4)^2}{28} - \frac{(x-3)^2}{63} = 1$$

Nov 2-8:08 PM