

Warm-Up 4/11 4.

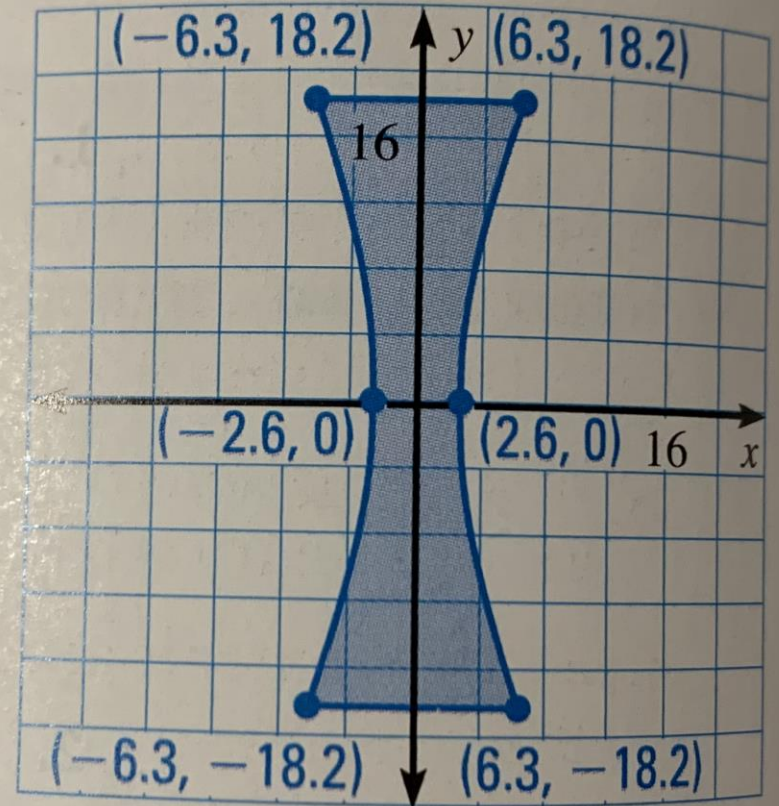
Graph the equation. Identify the focus (foci), directrix, vertices, co-vertices, center, asymptotes.

1.
$$\frac{(y - 5)^2}{9} - (x + 3)^2 = 1$$

2.
$$(x - 6)^2 + (y + 1)^2 = 36$$

3.
$$(x + 4)^2 = 6(y - 2)$$

7. The *Tractricious* sculpture at the Fermi National Accelerator Laboratory in Batavia, Illinois, has a hyperbolic cross section as shown below.



Use the graph to write an equation of the hyperbola that models the cross section of the sculpture. (Each unit represents 1 foot.) Then explain how you found the equation.

5. Classify the conic section and write the equation in standard form.

$$2y^2 - 3x^2 - 4y + 12x + 8 = 0$$

6. Write an equation of the conic section with

$$\text{Eccentricity} = \frac{\sqrt{21}}{5}$$

$$\text{Center: } (-8, 8)$$

$$\text{Vertex: } (2, 8)$$

Agenda 4/11 THURS

1. Warm-Up
2. Problem Solving Review
3. Ch 9 Review

Condense your CH 9 Notes to 1-2 pages.
Address each section **(9.1 – 9.7 EXT)** and
use examples. Please be neat!

Ch 9 Test 4/12 Fri