

Monday	Tuesday	Wednesday	Thursday	Friday
				4/10 7.1 Parabolas HW #51 Page 428 #1,3, 11,13, 15-23 odd
4/13 Holiday	4/14 7.2 Ellipses & Circles HW #52 Page 438 1-13 odd, 43, 45, 47, 53	4/15 7.3 Hyperbolas HW #54 Word Problem worksheet	4/16 Review Session	4/17 Test 7.1-7.3

NC Objectives

- 1.02 Use the quadratic relations (parabola, circle, ellipse, hyperbola) to model and solve problems; justify results.
- Solve using tables, graphs, and algebraic properties.
 - Interpret the constants and coefficients in the context of the problem.

Pre-Calculus Objective 1.02

Conics

Vocabulary/Concepts/Skills:

- Parabola
- Circle
- Ellipse
- Hyperbola
- Conic Sections
- Standard Form
- Center
- Focus
- Major/Minor Axes
- Vertices
- Focal axis
- Lines of Symmetry
- Directrix
- Asymptotes
- Transformations
- Parametric Forms
- Solve Equations and Inequalities Justifying Steps Used

Sample Exam Question

- 3 A quadratic function, f , has zeros P and Q , such that $P + Q = 5$ and $\frac{1}{P} + \frac{1}{Q} = 8$.

Which choice describes f ?

A $f(x) = 8x^2 - 40x + 5$

B $f(x) = 8x^2 - 40x - 5$

C $f(x) = 2x^2 - 10x + 5$

D $f(x) = 2x^2 - 10x - 5$

- 13 What is the distance between y -intercepts of the graph of $x + 8 = 2(y + 3)^2$?

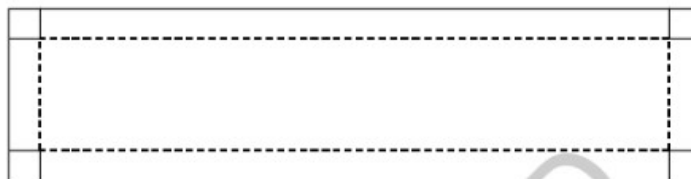
A 4

B 6

C 11

D 15

- 20 James had a rectangular piece of cardboard that was four times as long as it was wide. He wanted to use the cardboard to make a box with no lid. To do this, he first cut a 3-by-3-inch square out of each of the four corners of the piece of cardboard, as shown in the picture below.



Then James folded the cardboard along the four dotted lines shown in the picture. This created an open box with a volume of 336 cubic inches.

What was the width of the sheet of cardboard that James started with?

A 10.5 inches

B 9.5 inches

C 8.5 inches

D 7.5 inches