

Cornelia Connelly School  
Summer Work  
AP Calculus AB

Book: *Calculus of a Single Variable* (your textbook)

Author: Larson, Hostetler, and Edwards

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Complete the following problems. These problems will be reviewed and tested upon at the end of the first week of school. These problems cover topics in Algebra II and Precalculus and are necessary for success in the AP Calculus course. The solutions are in the back of the book.

Section P.1

Pg. 8: 1, 3, 19, 21, 23, 25, 27, 31, 45, 61, 63, 67, 69, 71, 77, 79, 85

Section P.2

Pg. 16: 1-19 odd, 23-43 odd, 57, 59, 63, 69, 71, 79

Section P.3

Pg. 27: 1-27 odd, 31, 35, 37, 39, 43, 47, 49, 51, 59, 75, 79, 81, 83, 93

Additionally, complete the summer work Precalculus Review Worksheets that are attached. There will be a Summer Work test at the end of the first week of school covering this material.

AP CALCULUS AB  
PRECALC REVIEW WORKSHEETS

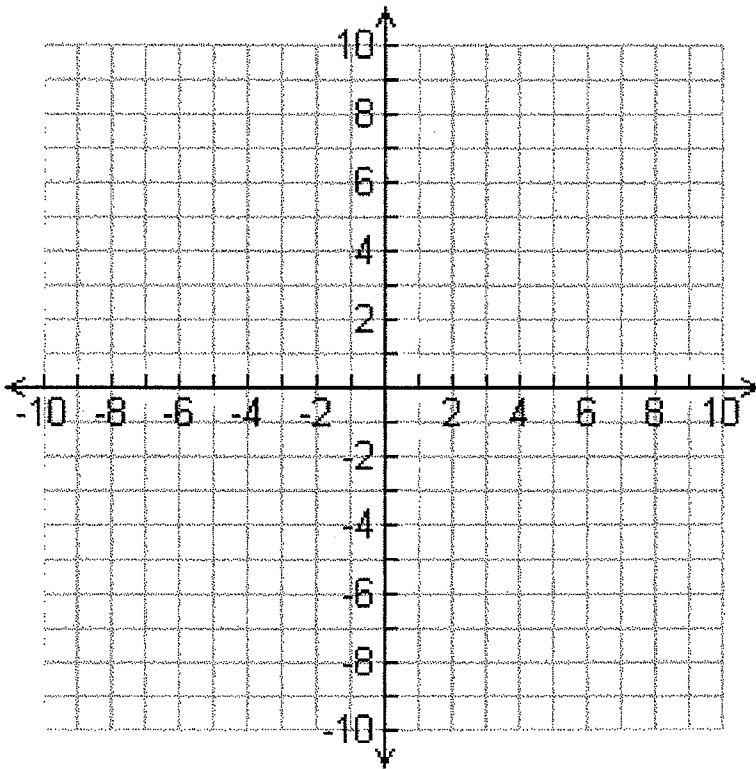
Identify the domain, range, x-intercept(s), y-intercept and asymptotes for the following functions. Also sketch the graph based on your identifications. No Calculators!

(a).  $f(x) = x^2 - 4x + 2$

DOMAIN: \_\_\_\_\_ RANGE: \_\_\_\_\_ X-INTERCEPTS: \_\_\_\_\_

Y-INTERCEPT: \_\_\_\_\_ ASYMPTOTES: \_\_\_\_\_

SKETCH

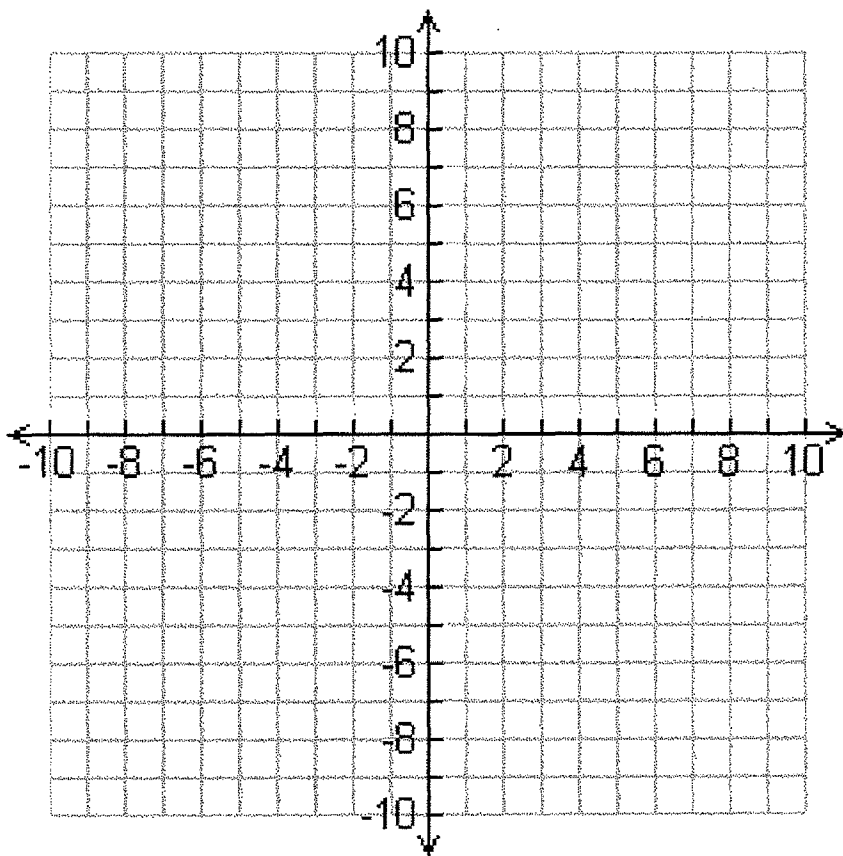


(b).  $f(x) = \ln(x+4)$

DOMAIN: \_\_\_\_\_ RANGE: \_\_\_\_\_ X-INTERCEPTS: \_\_\_\_\_

Y-INTERCEPT: \_\_\_\_\_ ASYMPTOTES: \_\_\_\_\_

SKETCH

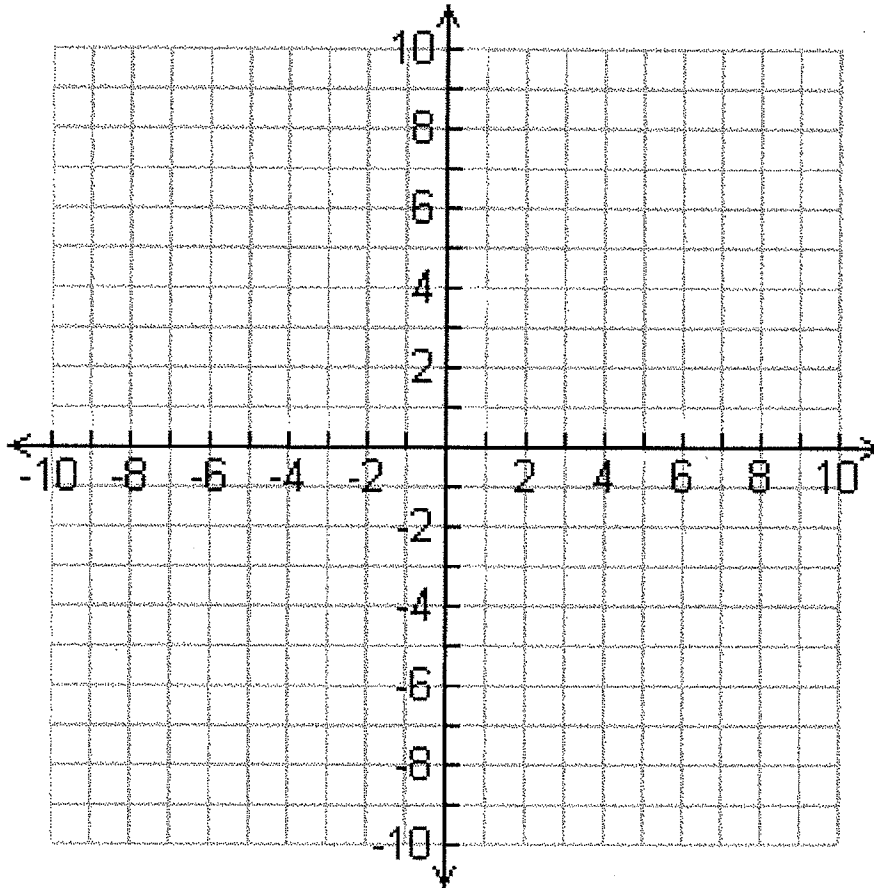


(c).  $f(x) = 4^{x-3} - 2$

DOMAIN: \_\_\_\_\_ RANGE: \_\_\_\_\_ X-INTERCEPTS: \_\_\_\_\_

Y-INTERCEPT: \_\_\_\_\_ ASYMPTOTES: \_\_\_\_\_

SKETCH

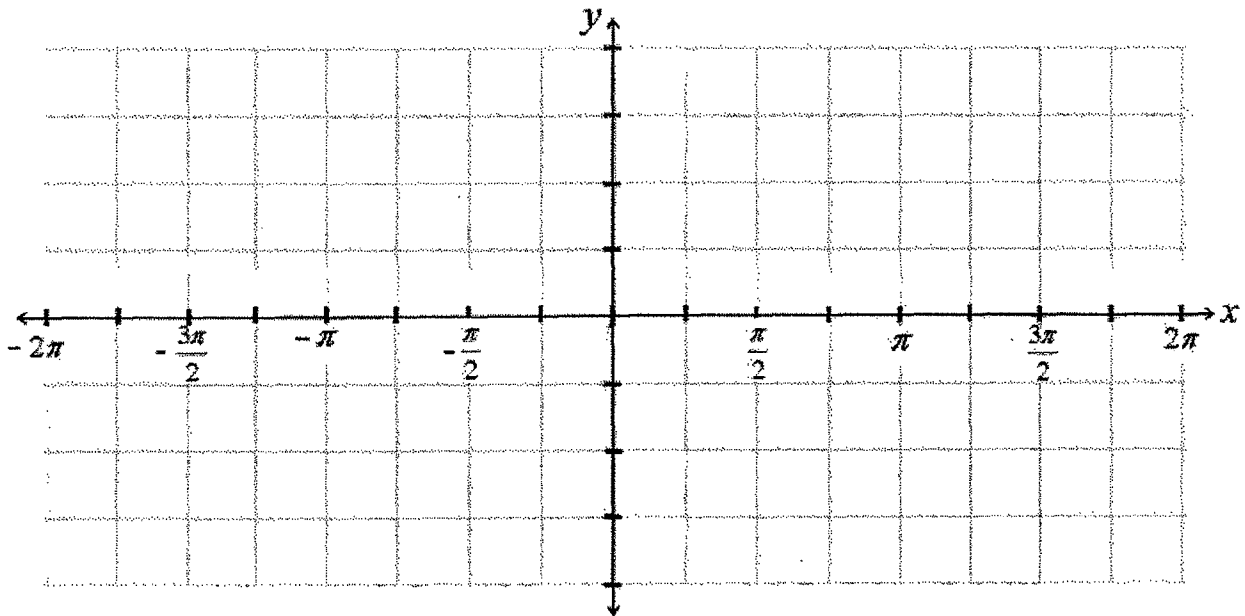


(d).  $f(x) = 4 \cos(2x)$

DOMAIN: \_\_\_\_\_ RANGE: \_\_\_\_\_ X-INTERCEPTS: \_\_\_\_\_

Y-INTERCEPT: \_\_\_\_\_ ASYMPTOTES: \_\_\_\_\_

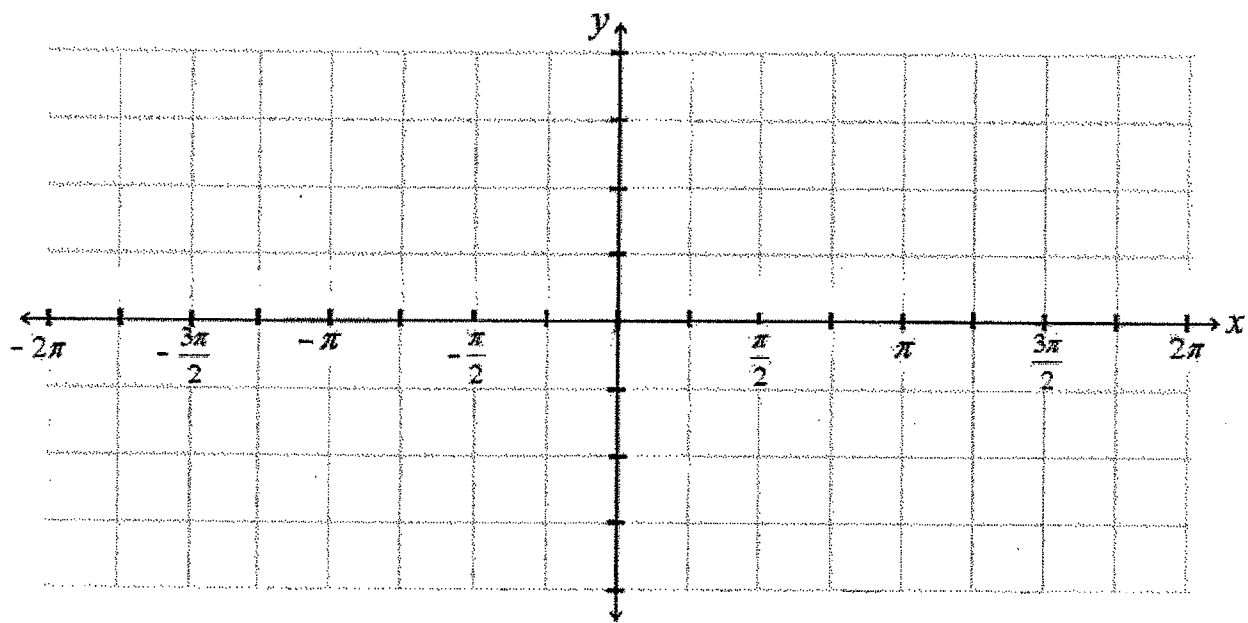
SKETCH



(e).  $f(x) = \tan(x + \pi/4)$

DOMAIN: \_\_\_\_\_ RANGE: \_\_\_\_\_ X-INTERCEPTS: \_\_\_\_\_

Y-INTERCEPT: \_\_\_\_\_ ASYMPTOTES: \_\_\_\_\_



(f).  $f(x) = \frac{2x-8}{x-1}$

DOMAIN: \_\_\_\_\_ RANGE: \_\_\_\_\_ X-INTERCEPTS: \_\_\_\_\_

Y-INTERCEPT: \_\_\_\_\_ ASYMPTOTES: \_\_\_\_\_

SKETCH

