

Verse:

Name:

Period:

Date:

Pre-Calculus Worksheet
Graphs with Asymptotes and Holes

Graph:

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

2. $y = \frac{3x - 6}{x^2 - x - 2}$

3. $y = \frac{x + 2}{x^2 + 5x + 6}$

4. $y = \frac{-x^2 - 5x + 6}{x + 6}$

5. $y = \frac{4}{2 - x}$

6. $y = \frac{x - 2}{x^2 - 3x + 2}$

7. (3.6)

Find the amount accumulated after investing a principal of \$450 for 3 years at an interest of 4.6% compounded annually.

8. (3.6)

Find the present value of a loan with an annual interest rate of 5.5% and periodic payments of \$550 for a term of 5 years, with payments made and interest charged 12 times per year.

9. (9.5)

Evaluate each finite series:

a) $\sum_{n=1}^5 7$

b) $\sum_{n=1}^4 \frac{1}{n}$

10. (9.2)

Expand the binomial (using Pascal's Triangle or the Binomial Theorem):

$(2x + y)^5$

11. (9.2)

Find the coefficient of x^8 in the expansion of $(x - 2)^{11}$.