

Name _____

Period _____

Date _____

Ms. Schmidt

Pre-Calculus

Bi-Weekly Homework Quiz 10

This is a weekly homework quiz that will be given every week and is due back the following Monday.

This quiz is due back: **January 16, 2018**

To receive full credit, all work must be shown. Any correct answer without work shown will receive only 1 point.

1) Simplify:

$$\frac{2x^2 - 7x + 3}{7x^2 - 28x} \div \frac{2x - 6}{16 - x^2} \cdot \frac{28x^3}{x^2 + 10x + 24}$$

2) Rationalize the denominator: $\frac{2 - i\sqrt{3}}{2 + i\sqrt{3}}$

3) Find the polynomial function given the roots: $\{0, 0, 3, -2 \pm i\sqrt{7}\}$

4) Simplify: $\frac{1 - \frac{4}{x}}{1 - \frac{2}{x} - \frac{8}{x^2}}$

5) If $f(x) = x - 2$ and $g(x) = x^2 - 3x + 2$ find, $g(f(x))$.