

Math 101
Algebra Review 4

Name: _____
Date: _____

Evaluate the following for the functions $f(x) = 2x^2 - x$ and $g(x) = \frac{1}{x}$

1. $f(0)$
2. $g(6)$
3. $f(t + 4)$
4. $g(3x - 7)$

Solve for the indicated variable

5. Solve for x: $5 = \frac{x + 4}{x}$
6. Solve for y: $\sqrt{3}(y - 4) = 10 - y$
7. Solve for m: $\pi = \frac{2m}{m - 3}$
8. Solve for t: $\frac{t - 7}{3t + 4} = \frac{3 - t}{-3t + 2}$

Simplify each expression. Do not leave negative exponents in your answer

9. x^4x^3
10. $(x^4)^3$
11. $y^3(y^{-1} - 3y)$
12. $(26x^{10})^{-1}$
13. $\left(\frac{3z^2}{2y}\right)^{-3}$
14. $\left(\frac{x^3 - x}{x^5}\right)^{-2}$