

# Mini-Quiz 14

## Math 111

Name:

[10] Solve for  $y$ . Let  $x$ ,  $y$ , and  $z$  be real numbers. Assume no combinations of numbers on this sheet = 0

$$\frac{z}{x} = \frac{1}{yz} \quad x = \frac{8x+y}{-3y} \quad x = \frac{6}{3x-y} \quad 1 = \frac{1}{y} + \frac{1}{y} + \frac{1}{y+3}$$

Solve for  $g(x)$ . Combine like terms where given but you need not perform fraction addition. Let  $x$ ,  $z$ , and  $g(x)$  be real numbers. Assume no combinations of numbers on this sheet = 0

$$\frac{z}{x} = \frac{1}{g(x)} \quad x = \frac{7x+g(x)}{-g(x)} \quad \frac{1}{z} = \frac{1}{g(x)} + \frac{1}{x} \quad 1 = \frac{1}{g(x)} + \frac{1}{g(x)} + \frac{1}{g(x)+3}$$

$$x = \frac{x-3g(x)}{2x+g(x)-4}$$

$$g(x) = \frac{7g(x)-x}{g(x)}$$