Mini-Quiz 10 Math 111

Name:

[10] Solve for y. Combine like terms where given but you need not perform fraction addition. Let x and y be real numbers. Assume no combinations of numbers on this sheet

$$\frac{1}{x} = \frac{1}{y}$$

$$x = \frac{3-y}{2y}$$

$$x = \frac{3y}{y + 4x}$$

$$\frac{1}{x} = \frac{1}{y}$$
 $x = \frac{3-y}{2y}$ $x = \frac{3y}{y+4x}$ $x = \frac{2-3y}{-y+5}$

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 $x, y, z \neq 0$

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

$$x = \frac{g(x)}{2g(x) - 1}$$

$$x = \frac{-3+g(x)}{g(x)}$$
 $x = \frac{g(x)}{2g(x)-1}$ $-x = \frac{2-3g(x)}{-g(x)+5}$ $\frac{1}{g(x)} = \frac{1}{xz} + \frac{1}{z}$

$$\frac{1}{g(x)} = \frac{1}{xz} + \frac{1}{z}$$

$$-2g(x) = \frac{-2g(x)-12}{g(x)}$$

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