

# Mini-Quiz 8 Solutions

## Math 111

Name:

[10] Solve for  $y$ . Combine like terms where given but you need not perform fraction addition. Let  $x$ ,  $y$ , and  $z$  be real numbers. Assume  $x, y, z \neq 0$

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

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

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

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

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

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

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

$$= \frac{xz}{x+z}$$

$$x = \frac{1+3y}{y}$$

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

$$5 = \frac{3+xy}{y}$$

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

$$y = \frac{1}{x-3}$$

$$y = -3x$$

$$y = \frac{3}{5-x}$$

$$x = y$$

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

$$5y = \frac{x+2y}{y}$$

$$y = \frac{1}{x+2}$$

$$y = \frac{2 \pm \sqrt{4+20x}}{10}$$