

Intermediate Algebra
University of North Georgia
Fall 2015
Quiz #5

Name: Key Date: September 23, 2015

Multiply

$$1. (\sqrt{5x-6})^2 = \boxed{5x-6}$$

Think: $(\sqrt{2})^2 = \sqrt{2} \cdot \sqrt{2} = \sqrt{2 \cdot 2} = \sqrt{4} = 2$

$$2. (7\sqrt{x} - 3\sqrt{y})(2\sqrt{x} + \sqrt{y})$$

$$F: (7\sqrt{x}) \cdot (2\sqrt{x}) = 14x$$

$$O: (7\sqrt{x}) \cdot (\sqrt{y}) = 7\sqrt{xy}$$

$$I: (-3\sqrt{y}) \cdot (2\sqrt{x}) = -6\sqrt{xy}$$

$$L: (-3\sqrt{y}) \cdot (\sqrt{y}) = -3y$$

$$\boxed{14x + \sqrt{xy} - 3y}$$

Divide

$$3. \frac{2}{1-\sqrt{5}} \cdot \frac{1+\sqrt{5}}{1+\sqrt{5}} = \frac{2 + 2\sqrt{5}}{1-5} = \frac{2 + 2\sqrt{5}}{4}$$

$$= \boxed{\frac{1+\sqrt{5}}{2}}$$