## **Worksheet** – Dividing Radicals and Rationalizing Monomial Denominators

Simplify.

$$1)\ \frac{\sqrt{15}}{5\sqrt{20}}$$

2) 
$$\frac{\sqrt{8}}{\sqrt{100}}$$

3) 
$$\frac{\sqrt{6}}{\sqrt{27}}$$

4) 
$$\frac{3\sqrt{20}}{2\sqrt{4}}$$

5) 
$$\frac{4}{\sqrt{5}}$$

$$6) \ \frac{\sqrt{4}}{5\sqrt{3}}$$

7) 
$$\frac{\sqrt{5}}{\sqrt{3}}$$

$$8) \ \frac{\sqrt{2}}{2\sqrt{3}}$$

**Answers** 

1) 
$$\frac{\sqrt{15}}{5\sqrt{20}}$$

$$\frac{\sqrt{3}}{10}$$

3) 
$$\frac{\sqrt{6}}{\sqrt{27}}$$

$$\frac{\sqrt{2}}{3}$$

$$5) \frac{4}{\sqrt{5}}$$

$$4\sqrt{5}$$

7) 
$$\frac{\sqrt{5}}{\sqrt{3}}$$
  $\frac{\sqrt{15}}{\sqrt{3}}$ 

2) 
$$\frac{\sqrt{8}}{\sqrt{100}}$$

$$\frac{\sqrt{2}}{5}$$

4) 
$$\frac{3\sqrt{20}}{2\sqrt{4}}$$

$$\frac{3\sqrt{5}}{2}$$

$$6) \ \frac{\sqrt{4}}{5\sqrt{3}}$$

$$\frac{2\sqrt{3}}{15}$$

8) 
$$\frac{\sqrt{2}}{2\sqrt{3}}$$

$$\frac{\sqrt{6}}{6}$$