

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Simplifying Radical Expressions Involving Fractions****Simplify.**

1)  $\frac{5\sqrt{3} - 3\sqrt{2}}{3\sqrt{2} - 2\sqrt{3}}$

2)  $\frac{\sqrt{7} + \sqrt{5}}{\sqrt{5} + \sqrt{2}}$

3)  $\frac{2 + \sqrt{5}}{6 - \sqrt{3}}$

4)  $\frac{\sqrt{31} a^5 b^3}{\sqrt{2} a b^2}$

5)  $\frac{1 + \sqrt{2}}{3 + \sqrt{5}}$

6)  $\frac{8\sqrt{3}}{\sqrt{k}}$

7)  $\frac{2\sqrt{5}r}{\sqrt{m^3}}$

8)  $\frac{\sqrt{7} - \sqrt{3}}{\sqrt{3} - \sqrt{7}}$

9)  $\frac{\sqrt{a}}{\sqrt{a} + \sqrt{b}}$

10)  $\frac{6\sqrt{45}x^3}{3\sqrt{5}x}$



$$1) \frac{5\sqrt{3} - 3\sqrt{2}}{3\sqrt{2} - 2\sqrt{3}}$$

$$\frac{3\sqrt{6} + 4}{2}$$

$$2) \frac{\sqrt{7} + \sqrt{5}}{\sqrt{5} + \sqrt{2}}$$

$$\frac{\sqrt{35} - \sqrt{14} + 5\sqrt{10}}{3}$$

$$3) \frac{2 + \sqrt{5}}{6 - \sqrt{3}}$$

$$\frac{12 + 2\sqrt{3} + 6\sqrt{5} + \sqrt{15}}{33}$$

$$4) \frac{\sqrt{31} a^5 b^3}{\sqrt{2} a b^2}$$

$$4 a^2 \sqrt{b}$$

$$5) \frac{1 + \sqrt{2}}{3 + \sqrt{5}}$$

$$\frac{3 - \sqrt{5} + 3\sqrt{2} - \sqrt{10}}{4}$$

$$6) \frac{8\sqrt{3}}{\sqrt{k}}$$

$$\frac{8\sqrt{3}k}{k}$$

$$7) \frac{2\sqrt{5}r}{\sqrt{m^3}}$$

$$\frac{2\sqrt{5}mr}{m^2}$$

$$8) \frac{\sqrt{7} - \sqrt{3}}{\sqrt{3} - \sqrt{7}}$$

$$-1$$

$$9) \frac{\sqrt{a}}{\sqrt{a} + \sqrt{b}}$$

$$\frac{a - \sqrt{ab}}{a - b}$$

$$10) \frac{6\sqrt{45}x^3}{3\sqrt{5}x}$$

$$6x$$