1.9 Radicals and Radical Operations II

Simplifying Radicals: Radicals can often be simplifies. This can allow you to collect "like radicals" when it does not appear that there are any of them in a question.

$\sqrt{20}$

Examples:

1. $\sqrt{18}$ 2. $\sqrt{28}$

3. $\sqrt{48}$ 4. $\dfrac{\sqrt{48}}{\sqrt{6}}$

5. $\sqrt{\dfrac{2}{9}}$

Sometimes changing into mixed radicals will allow you to reduce substantially.

Example: $\dfrac{14\sqrt{3}}{\sqrt{12}}$

Simplify the following:

1. $2\sqrt{6} * 3\sqrt{3}$

2. $\dfrac{10\sqrt{12}}{2\sqrt{6}}$

3. $\dfrac{6-\sqrt{45}}{3}$