Breaking Down Radicals

Example 1: Removing Perfect Squares

I Do	I Do	We Do
$\sqrt{50}$	$\sqrt{192}$	$\sqrt{300}$
① $\sqrt{25 \cdot 2}$ $\sqrt{25} \cdot \sqrt{2}$ $5\sqrt{2}$	96 48 6 8 3 4 $2 \cdot 2 \cdot 2\sqrt{3}$ $8\sqrt{3}$	① $\sqrt{100 \cdot 3}$ $\sqrt{100} \cdot \sqrt{3}$ $10\sqrt{3}$
② $\sqrt{50}$ 10 2 $5\sqrt{2}$		② $\sqrt{300}$ 3 100 $10\sqrt{3}$

We Do	You Do	You Do
$\sqrt{18}$ $\sqrt{9 \cdot 2}$ $\sqrt{9} \cdot \sqrt{2}$ $3\sqrt{2}$	$\sqrt{405}$ 5 81 $9\sqrt{5}$	$\sqrt{252}$ 16 42 6 7 $6\sqrt{7}$

Example 2: Multiplying Radicals

I Do	I Do	We Do
$\sqrt{8} \cdot \sqrt{12}$ $\sqrt{96}$ 8 12 2 3 $4\sqrt{6}$	$\sqrt{13} \cdot \sqrt{52}$ $\sqrt{13 \cdot 52}$ $\sqrt{676}$ 26	$\sqrt{7} \cdot \sqrt{21}$ $\sqrt{147}$ 7 21 3 $7\sqrt{3}$

IXL Lessons: Algebra → EE.1