Practice Run

1. Simplify the following and express each answer as an exact value.

Entire Radical	Show all steps	Mixed Radical
$\sqrt{54}$	$\sqrt{54} = \sqrt{9 \times 6} = \sqrt{9} \times \sqrt{6}$ or 54 /\ 9 6 /\ \ 3 3 6 $\sqrt{54} = \sqrt{3^2 \times 6}$	$3\sqrt{6}$
$\sqrt{27}$		

2.   Simplify the following and express each answer as an exact value.

Entire Radical	Show all steps	Mixed Radical
$\sqrt{300}$		
$\sqrt{189}$		

Compare your answers.

1.   Simplify the following and express each answer as an exact value.

Entire Radical	Show all steps	Mixed Radical
$\sqrt{54}$	$\sqrt{54} = \sqrt{9 \times 6} = \sqrt{9} \times \sqrt{6}$ or 54 9 6 3 3 6 $\sqrt{54} = \sqrt{3^2 \times 6}$	$3\sqrt{6}$
$\sqrt{27}$	$\sqrt{27} = \sqrt{9 \times 3} = \sqrt{9} \times \sqrt{3}$ or 27 9 3 3 3 3 $\sqrt{27} = \sqrt{3^2 \times 3}$	$3\sqrt{3}$

2.   Simplify the following and express each answer as an exact value.

Entire Radical	Show all steps	Mixed Radical
$\sqrt{300}$	$\sqrt{300} = \sqrt{100 \times 3} = \sqrt{100} \times \sqrt{3}$ or 300 / \ 100 3 / \ \ 10 10 3 /\ /\ \ 2 5 2 5 3 $\sqrt{300} = \sqrt{2^2 \times 5^2 \times 3}$	$10\sqrt{3}$
$\sqrt{189}$	$\sqrt{189} = \sqrt{9 \times 21} = \sqrt{9} \times \sqrt{21}$ or 189 / \ 9 21 /\ \ 3 3 21 $\sqrt{189} = \sqrt{3^2 \times 21}$	$= 3\sqrt{21}$