

Math II

Name _____

Simplifying Radicals

Date _____ Period _____

Simplify.

1) $\sqrt{18}$ $3\sqrt{2}$

$\begin{array}{r} \wedge \\ 9 \ 2 \\ \hline \end{array}$

$\begin{array}{r} \wedge \\ 3 \cdot 3 \\ \hline \end{array}$

2) $\sqrt{12}$ $2\sqrt{3}$

$\begin{array}{r} \wedge \\ 4 \ 3 \\ \hline \end{array}$

$\begin{array}{r} \wedge \\ 2 \cdot 2 \\ \hline \end{array}$

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

$\begin{array}{r} \wedge \\ 4 \ 2 \\ \hline \end{array}$

$\begin{array}{r} \wedge \\ 2 \cdot 2 \\ \hline \end{array}$

4) $\sqrt{27}$ $3\sqrt{3}$

$\begin{array}{r} \wedge \\ 9 \ 3 \\ \hline \end{array}$

$\begin{array}{r} \wedge \\ 3 \cdot 3 \\ \hline \end{array}$

5) $\sqrt{16}$ 4

$\begin{array}{r} \wedge \\ 4 \ 4 \\ \hline \end{array}$

6) $\sqrt{100}$ 10

$\begin{array}{r} \wedge \\ 10 \ 10 \\ \hline \end{array}$

7) $\sqrt{30}$ $\sqrt{30}$

$\begin{array}{r} \wedge \\ 10 \ 3 \\ \hline \end{array}$

$\begin{array}{r} \wedge \\ 2 \ 5 \\ \hline \end{array}$

8) $\sqrt{20}$ $2\sqrt{5}$

$\begin{array}{r} \wedge \\ 4 \ 5 \\ \hline \end{array}$

$\begin{array}{r} \wedge \\ 2 \cdot 2 \\ \hline \end{array}$

9) $\sqrt{125}$ $5\sqrt{5}$

$\begin{array}{r} \wedge \\ 25 \ 5 \\ \hline \end{array}$

$\begin{array}{r} \wedge \\ 5 \cdot 5 \\ \hline \end{array}$

10) $\sqrt{75}$ $5\sqrt{3}$

$\begin{array}{r} \wedge \\ 25 \ 3 \\ \hline \end{array}$

$\begin{array}{r} \wedge \\ 5 \cdot 5 \\ \hline \end{array}$

11) $\sqrt{45}$ $3\sqrt{5}$

$\begin{array}{r} \wedge \\ 9 \ 5 \\ \hline \end{array}$

$\begin{array}{r} \wedge \\ 3 \cdot 3 \\ \hline \end{array}$

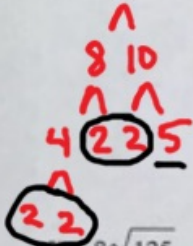
12) $\sqrt{48}$ $2 \cdot 2\sqrt{3}$ $4\sqrt{3}$

$\begin{array}{r} \wedge \\ 4 \ 12 \\ \hline \end{array}$

$\begin{array}{r} \wedge \\ 2 \cdot 2 \ 4 \ 3 \\ \hline \end{array}$

$\begin{array}{r} \wedge \\ 2 \cdot 2 \\ \hline \end{array}$

13) $\sqrt{80}$



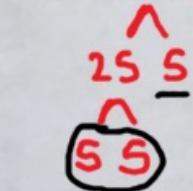
$2 \cdot 2 \sqrt{5}$
 $4 \sqrt{5}$

14) $\sqrt{64}$



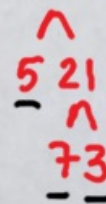
8

15) $-8\sqrt{125}$



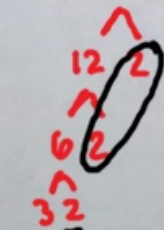
$-8 \cdot 5 \sqrt{5}$
 $-40 \sqrt{5}$

16) $6\sqrt{105}$



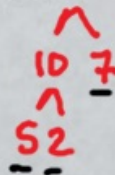
$6 \sqrt{105}$

17) $5\sqrt{24}$



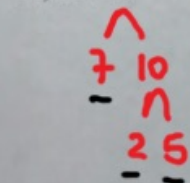
$5 \cdot 2 \sqrt{3 \cdot 2}$
 $10 \sqrt{6}$

18) $6\sqrt{70}$



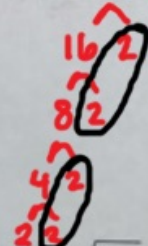
$6 \sqrt{70}$

19) $8\sqrt{70}$



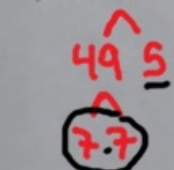
$8 \sqrt{70}$

20) $-2\sqrt{32}$



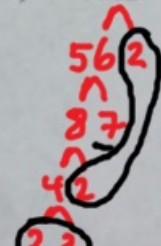
$-2 \cdot 2 \cdot 2 \sqrt{2}$
 $-8 \sqrt{2}$

21) $3\sqrt{245}$



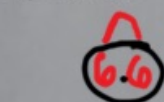
$3 \cdot 7 \sqrt{5}$
 $21 \sqrt{5}$

22) $-3\sqrt{112}$



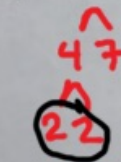
$-3 \cdot 2 \cdot 2 \sqrt{7}$
 $-12 \sqrt{7}$

23) $-8\sqrt{36}$



$-8 \cdot 6$
 -48

24) $-\sqrt{28}$



$-2 \sqrt{7}$