

Try This 1 – 2 Possible Solutions
TT 1.a.

TABLE 1A

This expression ...	... simplifies to ...	... which is equal to ...
$\sqrt{4 \times 25} =$	$\sqrt{100}$	10
$\sqrt{9 \times 36} =$	$\sqrt{324}$	18
$\sqrt{16 \times 4} =$	$\sqrt{64}$	8
$\sqrt{36 \times 100} =$	$\sqrt{3600}$	60

TABLE 1B

This expression ...	... simplifies to ...	... which is equal to ...
$\sqrt{4} \times \sqrt{25} =$	2×5	10
$\sqrt{9} \times \sqrt{36} =$	3×6	18
$\sqrt{16} \times \sqrt{4} =$	4×2	8
$\sqrt{36} \times \sqrt{100} =$	6×10	60

b. The values in the final columns of Tables 1A and 1B are identical.

c. $\sqrt{a \times b} = \sqrt{a} \times \sqrt{b}$

d. $\sqrt{4 \times 3} = \sqrt{4} \times \sqrt{3}$
 $= 2 \times \sqrt{3}$

TT 2.a.

TABLE 2A

This expression ...	... simplifies to ...	... which is equal to ...
$\sqrt{\frac{36}{9}}$	$\sqrt{4}$	2
$\sqrt{\frac{100}{4}}$	$\sqrt{25}$	5
$\sqrt{\frac{144}{16}}$	$\sqrt{9}$	3
$\sqrt{\frac{196}{49}}$	$\sqrt{4}$	2

TABLE 2B

This expression ...	... simplifies to ...	... which is equal to ...
$\frac{\sqrt{36}}{\sqrt{9}}$	$\frac{6}{3}$	2
$\frac{\sqrt{100}}{\sqrt{4}}$	$\frac{10}{2}$	5
$\frac{\sqrt{144}}{\sqrt{16}}$	$\frac{12}{4}$	3
$\frac{\sqrt{196}}{\sqrt{49}}$	$\frac{14}{7}$	2

b. The values in the final columns of Tables 2A and 2B are identical.

c. $\sqrt{\frac{a}{b}} = \frac{\sqrt{a}}{\sqrt{b}}$

d. $\sqrt{\frac{15}{4}} = \frac{\sqrt{15}}{\sqrt{4}}$
 $= \frac{\sqrt{15}}{2}$