Try This 1 - 2

TT 1. a. Complete the two tables by following the example given in the first row of each table. For the sake of simplicity, the numbers used are perfect squares. You may want to use your Perfect Squares and Perfect Cubes Data Sheet from Lesson 2 that you saved in your course folder.

TABLE 1A

| This expression | simplifies to | which is equal to |
|------------------------|------------------|-------------------|
| $\sqrt{4 \times 25} =$ | √ 100 | 10 |
| $\sqrt{9\times36}=$ | | |
| $\sqrt{16 \times 4} =$ | | |
| $\sqrt{36\times100}$ = | | |

TABLE 1B

| This expression | simplifies to | which is equal to |
|---------------------------------|---------------|-------------------|
| $\sqrt{4} \times \sqrt{25} =$ | 2×5 | 10 |
| $\sqrt{9} \times \sqrt{36} =$ | | |
| $\sqrt{16} \times \sqrt{4} =$ | | |
| $\sqrt{36} \times \sqrt{100} =$ | | |

- **b.** What do you notice about the values in the final columns of Tables 1A and 1B?
- **c.** What rule could be expressed that relates the expressions in the first column of each table?
- **d.** How could you simplify $\sqrt{4\times3}$?

TT 2. a. Complete the two tables by following the example given in the first row of each table. For the sake of simplicity, the numbers used are perfect squares. You may want to use your Perfect Squares and Perfect Cubes Data Sheet from Lesson 2 that you saved in your course folder.

TABLE 2A

| This expression | simplifies to | which is equal to |
|-------------------------|---------------|-------------------|
| $\sqrt{\frac{36}{9}}$ | $\sqrt{4}$ | 2 |
| $\sqrt{\frac{100}{4}}$ | | |
| $\sqrt{\frac{144}{16}}$ | | |
| $\sqrt{\frac{196}{49}}$ | | |

TABLE 2B

| This expression | simplifies to | which is equal to |
|--------------------------------|---------------|-------------------|
| $\frac{\sqrt{36}}{\sqrt{9}}$ | $\frac{6}{3}$ | 2 |
| $\frac{\sqrt{100}}{\sqrt{4}}$ | | |
| $\frac{\sqrt{144}}{\sqrt{16}}$ | | |
| $\frac{\sqrt{196}}{\sqrt{49}}$ | | |

- **b.** What do you notice about the values in the final columns of Tables 2A and 2B?
- **c.** What rule could be expressed that relates the expressions in the first column of each table?
- **d.** How could you simplify $\sqrt{\frac{15}{4}}$?