

## RADICAL CONNECTIONS

### Equivalent Expressions: Highlight

Highlight expressions equivalent to each other in the same color. Use a different color for each set of equivalent expressions.

$$\frac{10\sqrt{6}}{\sqrt{3}}$$

$$\sqrt{10} + 3\sqrt{10}$$

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

$$3\sqrt{3} \cdot 3\sqrt{2}$$

$$\sqrt{224} + \sqrt{56}$$

$$4\sqrt{10}$$

$$\frac{42\sqrt{2}}{\sqrt{7}}$$

$$6\sqrt{14}$$

$$11\sqrt{6} - \sqrt{24}$$

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

$$13\sqrt{2} - 3\sqrt{2}$$

$$9\sqrt{10} - 5\sqrt{10}$$

$$4\sqrt{6} + 5\sqrt{6}$$

$$10\sqrt{2}$$

$$\frac{8\sqrt{5}}{\sqrt{2}}$$

$$10\sqrt{14} - 4\sqrt{14}$$

$$\frac{9\sqrt{30}}{\sqrt{5}}$$

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

$$6\sqrt{2} + 4\sqrt{2}$$

$$9\sqrt{6}$$

### Equivalent Expressions: Complete the Table

Complete the table using the expressions you highlighted previously. Each row should be completed with equivalent expressions.

| Expression   | Addition | Subtraction | Multiplication | Division |
|--------------|----------|-------------|----------------|----------|
| $10\sqrt{2}$ |          |             |                |          |
| $9\sqrt{6}$  |          |             |                |          |
| $4\sqrt{10}$ |          |             |                |          |
| $6\sqrt{14}$ |          |             |                |          |

### Observations

I notice...

I wonder...