# Practice Run

- Identify the radicals in simplest form with a check mark.
- Simplify all radicals **not** in simplest form.
- State whether the radical is a Rational (Q) or Irrational ($\overline{Q}$) Number.
- Use a calculator to find the value, correct to three decimal places, where needed.

| Radical | Simplest form ✓ | Steps to simplest form | Q | $\overline{Q}$ | Value correct to three decimals (where needed) |
|---------|-----------------|------------------------|---|----------------|------------------------------------------------|
| $2\sqrt{32}$ | | | | | |
| $\sqrt{44}$ | | | | | |
| $\sqrt{196}$ | | | | | |
| $45\sqrt{2}$ | | | | | |

✓ Compare your answers.

- Identify the radicals in simplest form with a check mark.
- Simplify all radicals **not** in simplest form.
- State whether the radical is a Rational (Q) or Irrational ($\overline{Q}$) Number.
- Use a calculator to find the value, correct to three decimal places, where needed.

| Radical | Simplest form ✓ | Steps to simplest form | Q | $\overline{Q}$ | Value correct to three decimals (where needed) |
|---------|-----------------|------------------------|---|----------------|-----------------------------------------------|
| $2\sqrt{32}$ | | $2\sqrt{32}$ <br> $= 2\sqrt{16 \times 2}$ <br> $= 2\sqrt{4^2 \times 2}$ <br> $= 2 \times 4\sqrt{2}$ <br> $= 8\sqrt{2}$ | | ✓ | 11.314 |
| $\sqrt{44}$ | | $\sqrt{44}$ <br> $= \sqrt{4 \times 11}$ <br> $= \sqrt{2^2 \times 11}$ <br> $= 2\sqrt{11}$ | | ✓ | 6.633 |
| $\sqrt{196}$ | | $\sqrt{196}$ <br> $= 14$ | ✓ | | 14 |
| $45\sqrt{2}$ | ✓ | | | ✓ | 63.640 |