

RECALL

Inverse Operations

Operation	Multiplication \times	Subtraction $-$	Square x^2	Division \div	Addition $+$
Inverse					



Do Now: *Solve for the variable.*

$$g^2 = 81$$

Use calculator!

$$225 = w^2$$



AIM:



Solving Basic x^2 Equations

Steps:

- Isolate the x^2 term.
- Separate coefficient by multiplying and dividing.
- Take the square root of each side (\pm roots!).
- Check.

$$z^2 - 169 = 0$$

$$2b^2 = b^2 + 49$$

Solving Basic x^2 Equations

Let's Practice...

Steps:

- Isolate the squared variable term.
- Separate coefficient by multiplying and dividing.
- Take the square root of each side (\pm roots).
- Check.

$$z^2 - 3^2 = 4^2$$

$$7 + z^2 = 16$$

Solving Basic \sqrt{x} Equations

Steps:

- Isolate the square root expression.
- Separate coefficient by multiplying and dividing.
- Square each side.
- Check.

$$\sqrt{\frac{n}{5}} = 3$$

$$\sqrt{7y} = 14$$

More Solving Basic \sqrt{x} Equations

Steps:

- **Isolate** the square root expression.
- Separate coefficient by multiplying and dividing.
- Square each side.
- Check.

$$\sqrt{\frac{n}{3}} = 4$$

$$3\sqrt{x+1} = 27$$