

Find the inverse of the following equations.

7.  $y = 3x - 1$

$$x = 3y - 1$$

$$3y = x + 1$$

$$y = \frac{x+1}{3}$$

8.  $y = \frac{1}{2}x - 5$

$$x = \frac{1}{2}y - 5$$

$$\frac{x}{1} \cdot \frac{1}{2}y = (x+5) \cdot 2$$

$$y = 2x + 10$$

9.  $y = \sqrt{x+3}$

$$(x)^2 = (\sqrt{y+3})^2$$

$$x^2 = y + 3$$

$$y = x^2 - 3$$

10.  $y = (x-2)^3 + 1$

$$x = (y-2)^3 + 1$$

$$\sqrt[3]{(y-2)^3} = \sqrt[3]{x-1}$$

$$y-2 = \sqrt[3]{x-1}$$

$$y = \sqrt[3]{x-1} + 2$$

11.  $y = x^2 + 4$

$$x = y^2 + 4$$

$$\sqrt{y^2} = \sqrt{x-4}$$

$$y = \sqrt{x-4}$$

12.  $y = \sqrt[5]{5x+4}$

$$(x)^5 = (\sqrt[5]{5y+4})^5$$

$$x^5 = 5y + 4$$

$$\frac{5y}{5} = \frac{x^5 - 4}{5}$$

$$y = \frac{x^5 - 4}{5}$$

13.  $y = (x+2)^2$

$$\sqrt{x} = \sqrt{(y+2)^2}$$

$$y+2 = \sqrt{x} - 2$$

$$y = \sqrt{x} - 2$$

14.  $y = \frac{1}{x+2}$

$$y+2 \cdot x = \frac{1}{y+2} \cdot \frac{y+2}{1}$$

$$\frac{x}{x}(y+2) = \frac{1}{x}$$

$$y+2 = \frac{1}{x} - 2$$

$$y = \frac{1}{x} - 2$$