

9-5 Functions and Their Inverses

Warm Up

Solve for x in terms of y .

1. $y = \frac{2}{3}x - 6$

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

3. $y = \sqrt{x + 10}$

4. $y = 2\ln x$

9-6 Modeling Real-World Data

Warm Up

- Use a calculator to perform quadratic and exponential regressions on the following data.

x				
y				

9-5 Functions and Their Inverses

Warm Up

Solve for x in terms of y .

$$1. y = \frac{2}{3}x - 6 \quad x = \frac{3}{2}y + 9$$

$$2. y = (x + 2)^2 \quad x = \pm\sqrt{y} - 2$$

$$3. y = \sqrt{x + 10} \quad x = y^2 - 10$$

$$4. y = 2\ln x \quad x = e^{\frac{y}{2}}$$

9-6 Modeling Real-World Data

Warm Up

- Use a calculator to perform quadratic and exponential regressions on the following data.

x	3	5	8	13
y	19	50	126	340

$$\text{quadratic: } y \approx 2.13x^2 - 2x + 6.12$$

$$\text{exponential: } y \approx 10.57(1.32)^x$$