

10350 Solving Equations Quiz

1. Solve the equations.

1a. $\frac{4}{x} = \frac{x}{25}$

1b. $y(y - 2) = 3$

1c. $10 - 3(y - 4) = 7y$

2. Solve for x at the intersections of the curves

$$y = \frac{6}{x} \quad \text{and} \quad y = \frac{5}{x+2} + 1$$

3. Solve the following simultaneous equations.

3a.

$$3x - 2y = -5$$

$$2x + 3y = 1$$

3b.

$$y = 2x$$

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

4. Find x in the following equations:

4a. $3 \cdot 2^x = 24$

4b. $3 \cdot (x + 1)^{11} = 24$

4c. $3 \cdot 2^x = 12 \cdot 4^x$

5. Find x in terms of all other variables:

5a. $c = \frac{x^3 - p}{h + 1}$

5b. $y = \frac{x - a}{x + b}$