

Intro to Solving Equations - Class Examples

Date _____ Period _____

CLASS EXAMPLES: Solve each equation.

$$1) 4 + x = -1$$

$$\begin{array}{r|l} -4 & -4 \\ \hline x & -5 \end{array}$$

$$2) -36 = x - 16$$

$$\begin{array}{r|l} +16 & +16 \\ \hline -20 = x \end{array}$$

$$3) 10x = 130$$

$$\begin{array}{r|l} 10 & 130 \\ \hline x & 13 \end{array}$$

$$4) 9 = \frac{p}{8} \cdot 8$$

$$72 = \frac{8p}{8}$$

$$72 = p$$

Now you try: Solve each equation.

$$5) r + 7 = -11$$

$$\begin{array}{r|l} -7 & -7 \\ \hline r & -18 \end{array}$$

$$6) \frac{n}{5} = -15 \cdot 5$$

$$n = -75$$

CLASS EXAMPLES: Solve each equation with fractions.

$$7) \frac{3}{4}x = 9 \cdot \frac{4}{3}$$

$$\frac{12x}{12} = \frac{36}{3}$$

$$x = 12$$

$$8) -36 = \frac{4}{9}d \cdot \frac{9}{4}$$

$$-81 = d$$

CLASS EXAMPLES: Solve each equation.

$$9) 3 + 2x = -5$$

$$\frac{2x}{2} = \frac{-8}{2}$$

$$x = -4$$

$$10) -k + 4 = 5$$

$$\frac{-k}{-1} = \frac{1}{-1}$$

$$k = -1$$

$$11) \frac{k-1}{3} = -3 \cdot 3$$

$$\frac{3(k-1)}{3} = -9$$

$$\frac{k-1}{+1} = \frac{-9}{+1}$$

$$k = -8$$

$$12) 4 = \frac{n}{10} + 5$$

$$10 \cdot -1 = \frac{n}{10} \cdot 10$$

$$-10 = n$$

NOW YOUR TRY: Solve each equation.

$$13) 3 = \frac{5+a}{7} \cdot 7$$

$$21 = 5 + a$$

$$\frac{-5}{-5} = \frac{-5}{-5}$$

$$16 = a$$

$$14) -13 = 3 + 4x$$

$$\frac{-16}{4} = \frac{4x}{4}$$

$$-4 = x$$