



Check Up

Solve the following equations for the indicated variable.

1. $-49y - 7 = -399$

2. $21 + 4h + 7h = -34$

3. $\frac{x^2}{5} + 90 = 135, x \geq 0$

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Video demonstration of the solution for *Check Up 3* is provided.



Compare your answers.

Solve the following equations for the indicated variable.

1. $-49y - 7 = -399$

$$\begin{aligned} -49y - \cancel{7} + \cancel{7} &= -399 + 7 \\ -49y &= -392 \\ \frac{\cancel{-49}}{\cancel{-49}}y &= \frac{-392}{-49} \\ y &= 8 \end{aligned}$$

2. $21 + 4h + 7h = -34$

$$\begin{aligned} 21 + 11h &= -34 \\ \cancel{21} - \cancel{21} + 11h &= -34 - 21 \\ 11h &= -55 \\ \frac{\cancel{11}}{\cancel{11}}h &= \frac{-55}{11} \\ h &= -5 \end{aligned}$$

3. $\frac{x^2}{5} + 90 = 135, x \geq 0$

$$\begin{aligned} \frac{x^2}{5} + \cancel{90} - \cancel{90} &= 135 - 90 \\ \frac{x^2}{5} &= 45 \\ \frac{x^2}{\cancel{5}} \cdot \cancel{5} &= 45 \cdot 5 \\ x^2 &= 225 \\ \sqrt{x^2} &= \sqrt{225} \\ x &= \sqrt{(15)^2} \\ x &= 15 \end{aligned}$$