

Name: \_\_\_\_\_

## Solving one-step inequalities

Solve, graph and check.

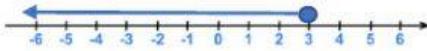
Example:  $3 + p \leq 6$

To solve this inequality, I need to subtract 3 from both sides.

$$\begin{array}{r} 3 + p \leq 6 \\ -3 \quad \quad \quad -3 \\ \hline p \leq 3 \end{array}$$

We need to graph the solution on the number line.

Locate the number 3 on the number line. Draw a **closed circle** above it and draw an arrow pointing towards the **left**.



Now let's check. To check, we can use any number that's **less than or equal to 3**. Let's choose  $p = 0$ .

$$\begin{aligned} 3 + p &\leq 6 \\ 3 + 0 &\stackrel{?}{\leq} 6 \\ 3 &\leq 6 \checkmark \end{aligned}$$

Solve, graph and check.

$p + 5 > 7$

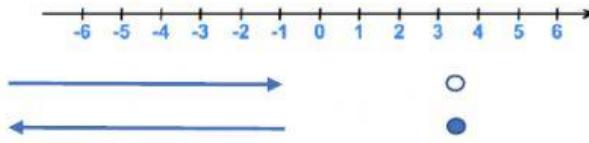
To solve this inequality, I need to **subtract 5** from both sides.

$$\begin{array}{r} p + 5 > 7 \\ -5 \quad \quad \quad -5 \\ \hline p > \end{array}$$

We need to graph the solution on the number line.

Locate the number **7** on the number line. Draw a **circle** above it and draw an arrow pointing towards the **right**.

Drag and drop the correct arrow and circle on the number line.



Now let's check. To check, we can use any number that's greater than 7.

Let's choose  $p =$

$$\begin{aligned} p + 5 &\stackrel{?}{>} 7 \\ +5 &> 7 \\ &> \checkmark \end{aligned}$$

