



Writing expressions

Turning a situation into algebra

- Today: build an expression from a real situation, and say what the letter means.

\$12 to join, then \$8 an hour

- Write an expression for h hours.

Turn & talk: is it $20h$, or $12 + 8h$?

Two questions, every time

- **What happens once?** → its own term, standing alone.
- **What repeats?** → multiplies the variable.

$12 + 8h$

- The \$12 is paid ONCE — it never multiplies h .
- The \$8 repeats every hour $\rightarrow 8h$.
- At $h = 3$: $12 + 24 = \$36$ ($20h$ would give \$60)

Never fold a one-time fee into the rate.

Word order can lie

- '7 less than n ' $\rightarrow n - 7$, not $7 - n$
- '15 more than n ' $\rightarrow n + 15$

Ask what you **START with, then what happens to it.**

Your turn

- A tank holds 25 L and loses 3 L a day. Write an expression for d days.
- Thumbs up when you have it.

Test with TWO values

- $18 + 7k$ and $25k$ both give 25 when $k = 1$.
- At $k = 2$: 32 versus 50 — now the error shows.

$k = 1$ hides fee-folding errors. Always test a second value.

Now you

- → In-class practice sheet