Answers and talk notes

Equations and Inequalities Problem Solving

What your student is learning

Tonight we read a word problem and decide whether to model it with an equation or an inequality, then solve it and check that the answer makes sense.

Answers

Ask your student to explain before you look.

1. **B.** at most. at most points to an inequality, because it gives a limit.
2. **C.** An equation, because exactly means equal. An equation, because exactly means equal.
3. **A.** r ≤ 40. r ≤ 40, because 40 riders or fewer fit.
4. **D.** $11. c = $11, because 20 − 9 = 11.
5. **C.** 5w ≥ 40. 5w ≥ 40, because her savings must be $40 or more.

Talk about it

Which clue word told you to use = and which told you to use an inequality symbol?

Home mission

Look at a store receipt. Say, "A total of $24 was split equally among 4 people." Can your student say if that is an equation or an inequality? Then try "at most $24."

When they are stuck, ask

- What words give the clue — 'equals/exactly' or 'at least/at most/more than/fewer than'?
- Let's write the model first, then solve it step by step.
- Does the answer make sense for real life? Could it be negative or a half person?

Try not to say

- Every word problem is an equation, so always use the equal sign.
- 'At most 200' means exactly 200, so use =.
- Once you get a number, you're done — no need to check if it makes sense.