

One Pair Two Possible Rules

Extend compare possible rules before choosing one

An exact constructed record supplies only (2 minutes, 10 liters). No starting amount or filling rule is given. Two candidate rules for 0 to 4 minutes are P: $y = 5 \times x$ and Q: $y = 3 \times x + 4$, where x is minutes and y is total liters.

- Show that both rules match the supplied pair.
- Explain which candidate is proportional and why.
- Choose one other allowed input at which their outputs differ. Calculate both outputs and explain how a reading at that input would distinguish these two candidates.
- Does choosing between these two candidates prove every future reading beyond their stated domain? Explain what is still limited.

Rules, evidence and qualified claim
