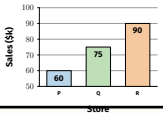
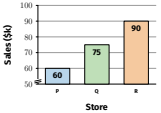
Build Tasks

Quantify how misleading a truncated-axis graph really is.

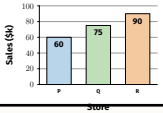
1. Calculate the true % difference between the lowest and highest bars.



2. Same data, with a break symbol. Does this remove the exaggeration?



3. Same data, honest zero-baseline axis. How different do the bars look now?

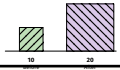


4. Two bar charts show the same data. One axis starts at 0, the other at 80. Which is honest, and why?

Build Tasks

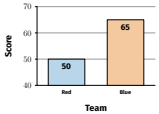
Work out how much area distortion exaggerates a pictogram.

5. The icon's width and height both double. By what factor does its area actually increase? Show your working.



6. A pictogram doubles an icon's height only (keeping its width fixed) when a value doubles. Is this still misleading? Explain.

7. Calculate the true % difference between Red's and Blue's scores.



8. Explain why cherry-picking a narrow time range can mislead readers, even on a graph with a perfectly honest axis.