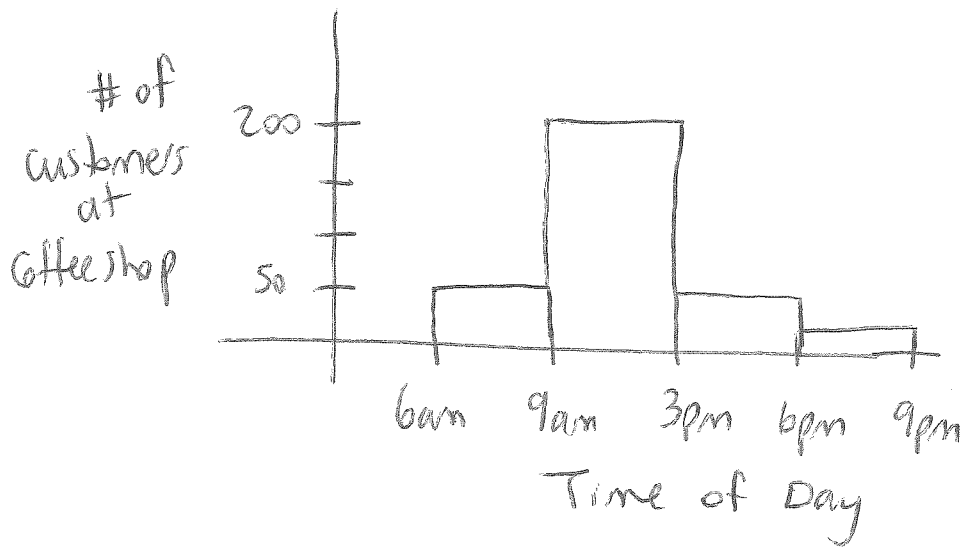


5.4 Misleading Graphs

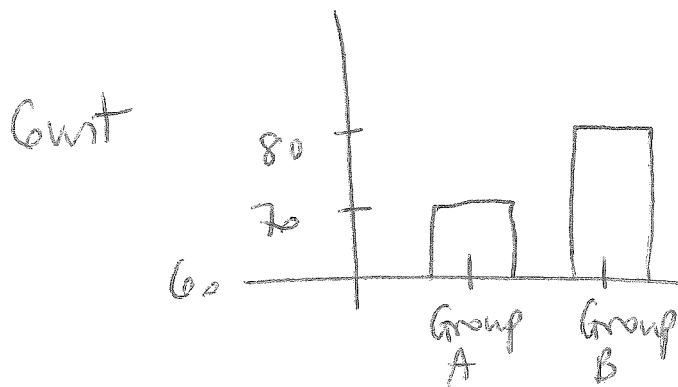
Common ways that graphs can mislead :

① Poorly defined categories



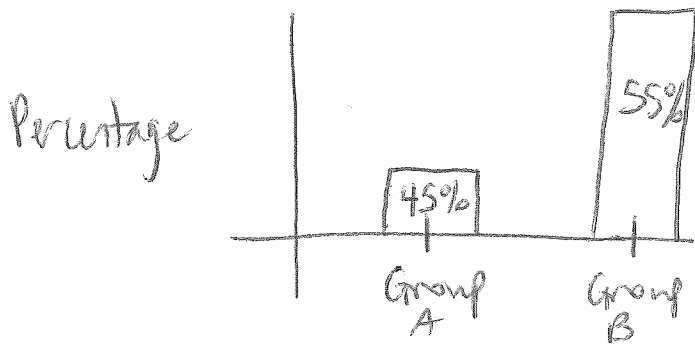
Misleading because not all bars represent intervals of 3 hours.

② Suppressing zero

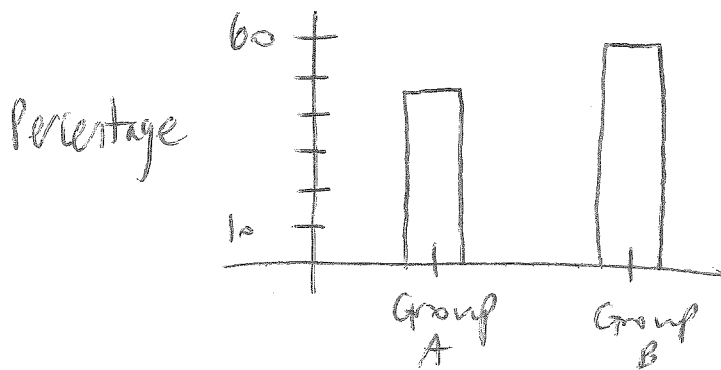


Misleading because vertical axis does not start at 0.

③ Inconsistent Scale

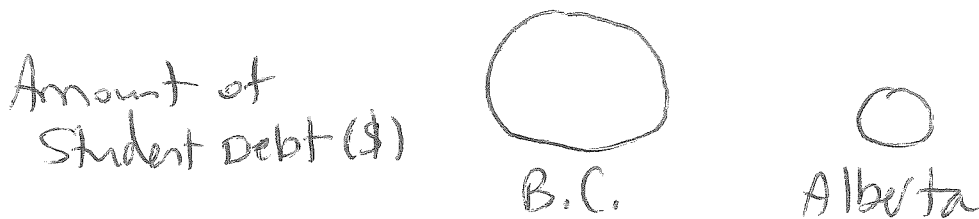


Misleading because vertical axis is not to scale.
It should be:



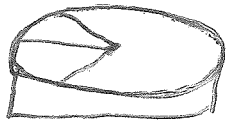
④ Pictographs

Pictographs use shapes instead of a vertical axis.



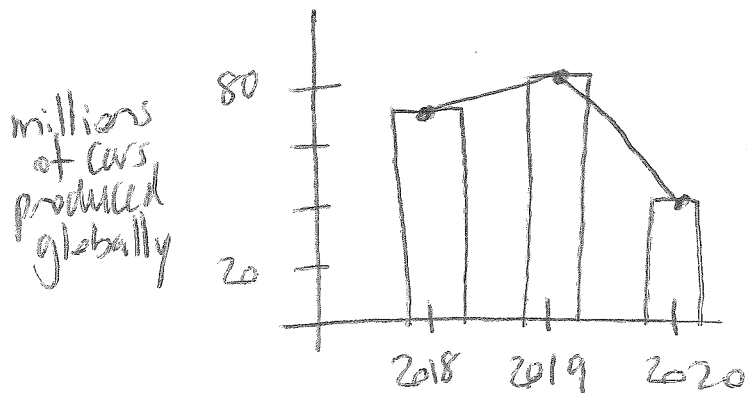
Misleading because we don't know if we're comparing diameters or areas of the circles.

⑤ 3D Graphs



Misleading because it's hard to see how big the pie slices are.

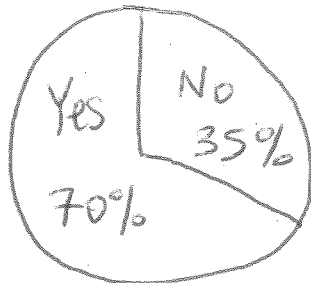
⑥ Cluttered



Misleading because it's a histogram and a line graph. Just a line graph would be better.

⑦ Percentages Don't Add to 100%

Bad:



Do You Live in BC?