LO: use reasoning to find missing angles

Look at the angles to the right.
What do you notice?


## Vertically opposite angles are identical.

A) Which pairs of angles are vertically opposite? List them in your book.


B) Calculate the missing angles below.

C) Do you agree with Annie? No, because $f$ is not vertically opposite.
D) Angle $f$ is one quarter of the size of angle $g$.

Angle $f$ is $28^{\circ}$. Are angles $x$ and $y$ vertically opposite?


No, because $f$ is $28^{\circ}$ so $g$ is $I 12^{\circ}\left(4 \times 28^{\circ}\right)$ which makes $140^{\circ}$ in total. $f$ and $g$ are not identical so they can't be vertically opposite which means $x$ and $y$ are not vertically opposite either.

