### 3.2 Perfect Squares, Perfect Cubes and Their Roots

*If a number can be represented as the $\square$ of a square whereby the sides of the square are whole numbers, we call the number a

Ex.
*100 is a perfect square but $100=$
Note: all $\qquad$ of a perfect square have

Ex. 324 =
*If a number can be represented as the $\square$ $\square$ of a cube whereby the sides of the cube are whole numbers, we call the number a $\qquad$ ex. consider $125=$

$$
\begin{aligned}
& \text { Note: all } \square \text { of a perfect cube } \\
& \text { have powers that are multiples of } \square
\end{aligned}
$$

ex.
ex. Make up a number that is a perfect square AND a perfect cube at the same time

