Q1. For each set of Logo Turtle commands below, state whether it would give you a square or not. If not, change the command so that it would create a square (as few as needed).

| Command | Is it a <br> square? | New Command |
| :--- | :--- | :--- |
| forward $100 \rightarrow$ left $90 \rightarrow$ forward 200 <br> $\rightarrow$ left $90 \rightarrow$ forward $100 \rightarrow$ left $90 \rightarrow$ <br> forward 200 |  |  |
| forward $90 \rightarrow$ left $90 \rightarrow$ forward 90 <br> left $90 \rightarrow$ forward $90 \rightarrow$ left $90 \rightarrow$ <br> forward 90 |  |  |
| forward $100 \rightarrow$ right $100 \rightarrow$ forward <br> $100 \rightarrow$ right $100 \rightarrow$ forward $100 \rightarrow$ <br> right $100 \rightarrow$ forward 100 |  |  |
| forward $5 \rightarrow$ right $90 \rightarrow$ forward $5 \rightarrow$ <br> right $90 \rightarrow$ forward $5 \rightarrow$ right $90 \rightarrow$ <br> forward 5 |  |  |

Q2. Suppose we define a square as a 4-sided polygon in which

- all sides are equal
- each angle is a right angle

Classify each of the following shapes, as squares or not squares. If you are not sure about some figures, put them in the column 'I'm not sure'.



| SQUARE | NOT A SQUARE | I'M NOT SURE |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |

Q3. For each shape (above) that you have put in the 'Not a Square' column, give reasons why you think it is not a square. (State which statement in the definition is contradicted).

