

## VEX CODE VR Activities



### Basketball Drills

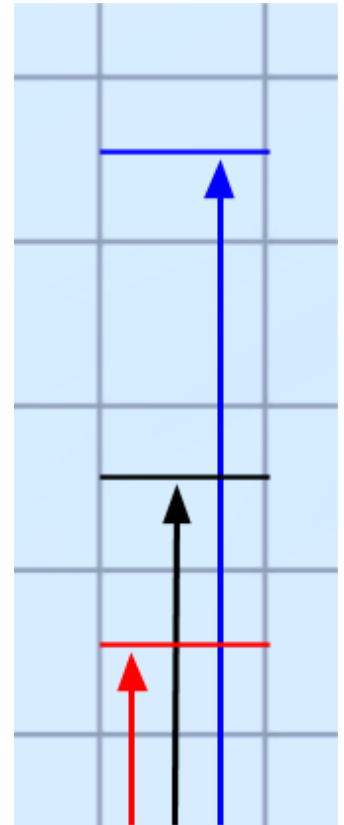
**Playground:** Grid Map

**Challenge:**

**Level 1:** Program the VR Robot to drive forward 1 grid square. Next, program the VR robot to drive in reverse to the beginning point. Continue this pattern for 2 grid squares, then 4 grid squares.

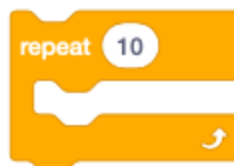
**Level 2:** Program the VR Robot to drive forward 1 grid square, stop, and return back 1 grid square to where the VR Robot started **without** using the reverse block. The VR Robot will need to turn around to drive back to the first position. Continue this pattern for 2 grid squares, then 4 grid squares.

**Level 3:** Build an algorithm (a process or set of rules) to move through all 1 to 8 grid squares in sequential order. The VR Robot should move to 1, go back to start, move to 2, go back to start. Continue this pattern for all 8 grid squares.



**Helpful Hints:**

- Each square in the Grid Map measures 200mm by 200mm.
- Want to make your project shorter? Try using the *Repeat* block from the Control category.



- Matching Python command:

```
for repeat_count in range(10):
```

[vr.vex.com](https://vr.vex.com)