magic 8 challenges

Before we get started

Complete the following guided tutorial

(https://www.microbit.co.uk/blocks/lessons/magic-8/activity), and your code should look like this:

```
show string "ASK A QUESTION"
show number 8

on shake
do clear screen
set randomNumber to pick random 0 to 2
do show string "YES"
else a if randomNumber estable to pick random 0 to 2
show string "YES"
else show string "NO"
show string "IDON'T KNOW"
show number 8
```

Challenge 1

Now let's increase the number of responses the magic 8 ball can give. How about 5 responses instead? Let's change the limit of pick random to 4.

```
show string "ASK A QUESTION"
show number 8

on shake
do clear screen
set randomNumber to pick random 0 to 4

or if randomNumber = 2

do show string "YES"
else of randomNumber = 1

do show string "NO"
```

Challenge 2

Now have the magic 8 ball respond "Try again" if randomNumber is 3.

```
show string "ASK A QUESTION"
show number 3

on shake
do clear screen
set randomNumber to pick random 0 to 4

or if randomNumber 1

do show string "TRY AGAIN"
else or if randomNumber 1

do show string "YES"
else or if randomNumber 1

do show string "YES"
else show string "NO"
else show string "NO"
```

Challenge 3

Now what about if **randomNumber** is 4? Let's have the magic 8 ball respond "Definitely!".

```
show string (*ASKAQUESTION)**

show number 3

on shake

do clear screen

set randomNumber to pick random 0 to 4

of randomNumber = 4

do show string (*DEFINITELY)**

else of randomNumber = 3

do show string (*TRYAGAIN)**

else of randomNumber = 2

do show string (*YES)**

else of randomNumber = 1

do show string (*YES)**

else show string (*NO)**

else show string (*IDONT KNOW)**

show number 3
```

Challenge 4

Add 3 more responses so your magic 8 ball has 8 possible responses. Be creative!

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