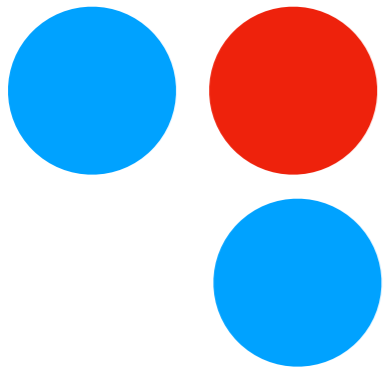


For these visual patterns, there are three questions.
You can answer them with equations.

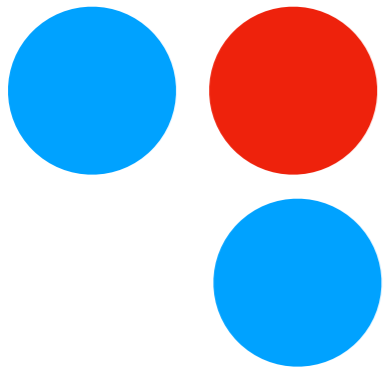
- 1) How many red in the n th state?
- 2) How many blue in the n th state?
- 3) How many total in the n th state?

Hint. Sometimes answering these questions in different orders first will be easiest.

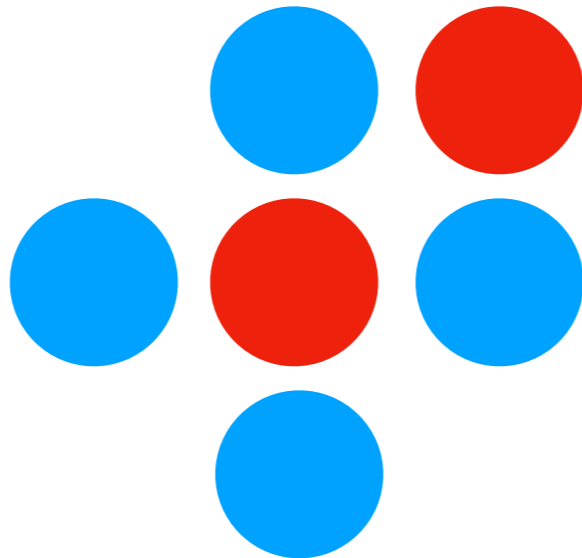
For more like these (in one color), see visualpatterns.org.



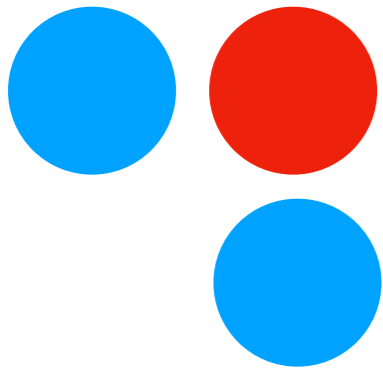
1



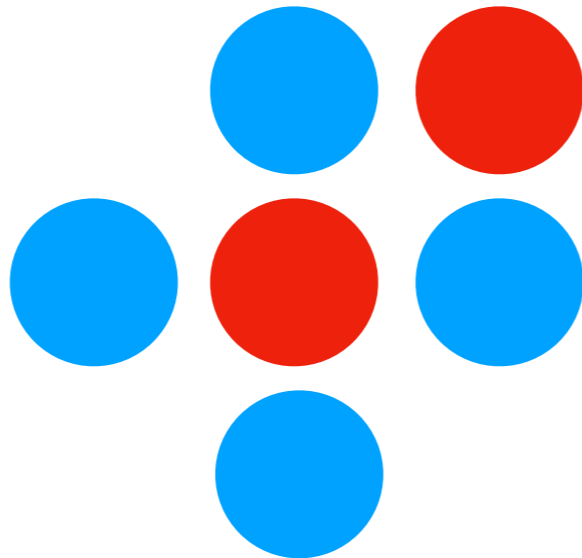
1



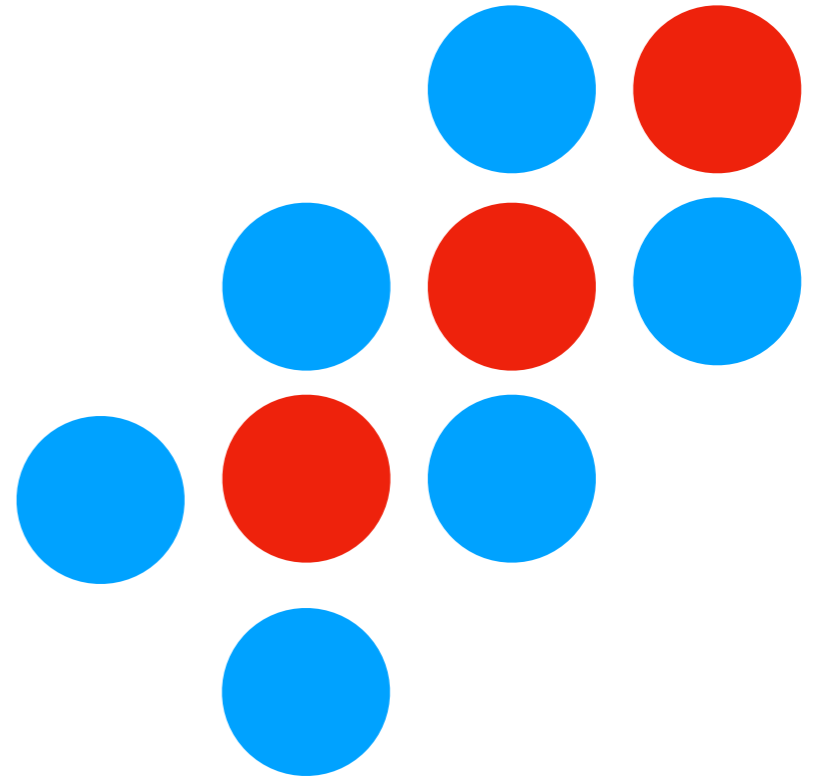
2



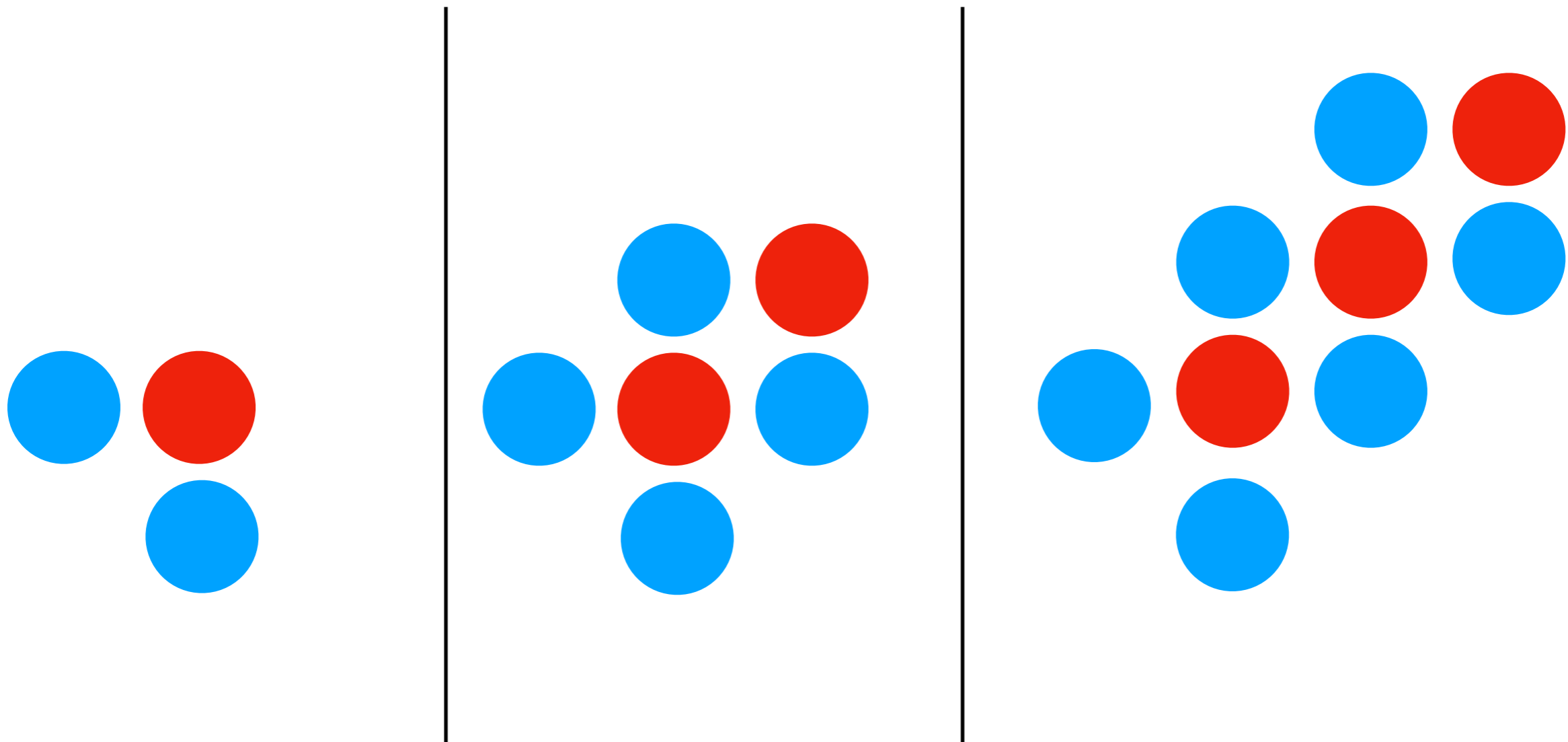
1



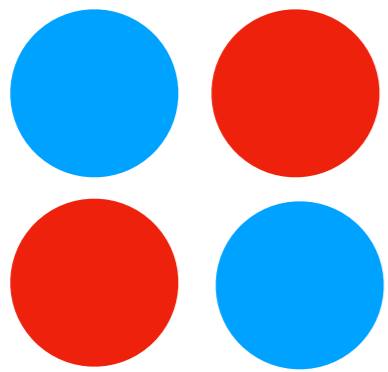
2



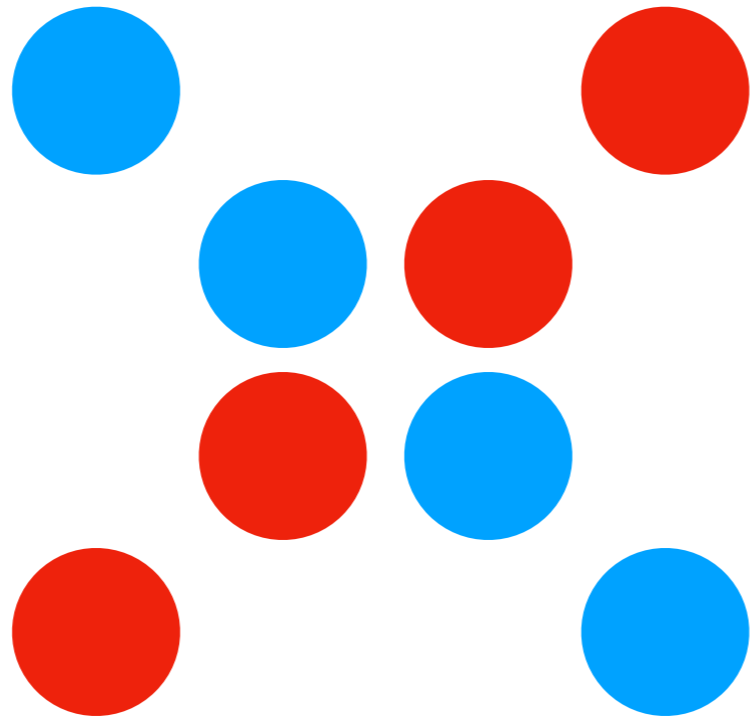
3



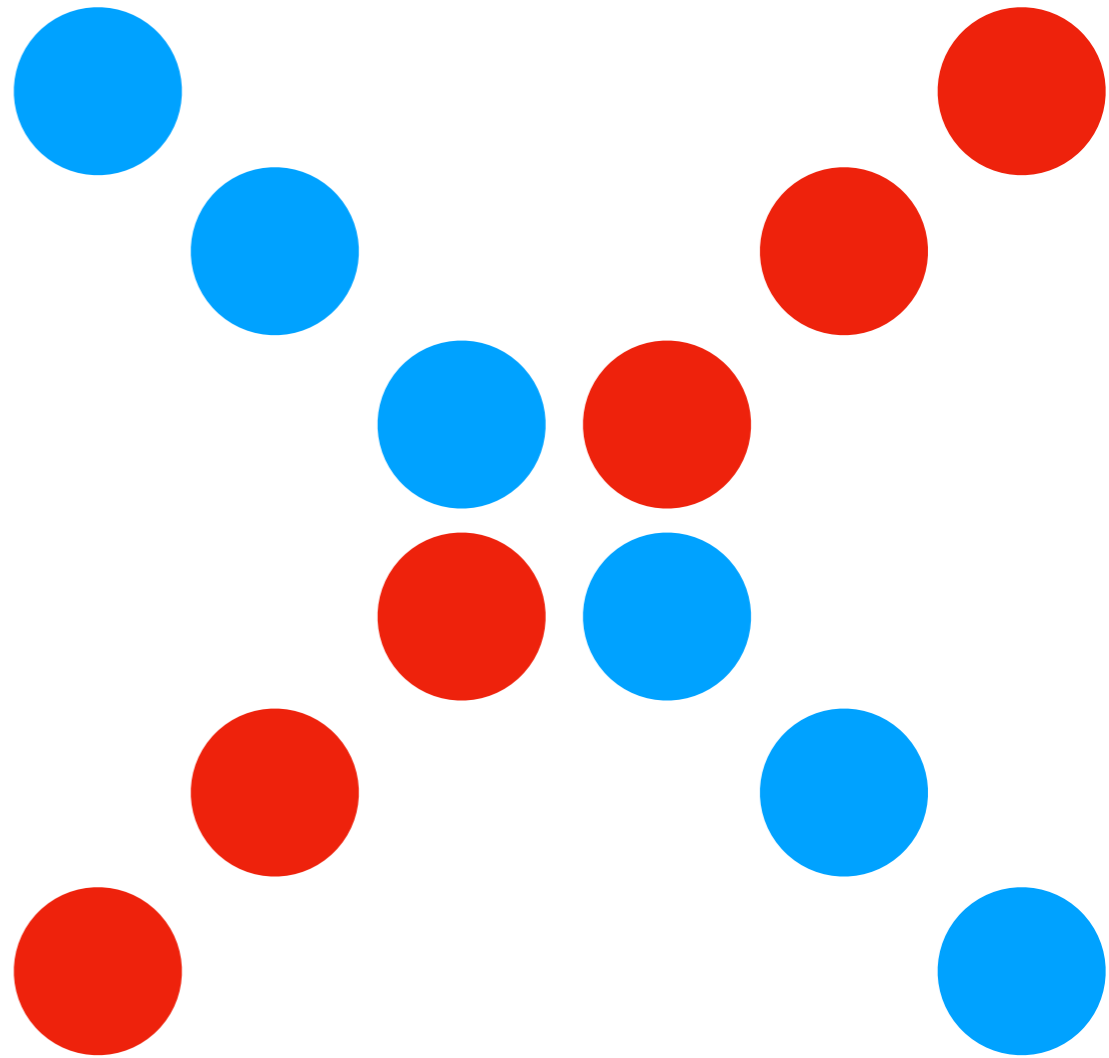
| Stage | Red | Blue | Total |
|----------|----------|-----------|-----------|
| 1 | 1 | 2 | 3 |
| 2 | 2 | 4 | 6 |
| 3 | 3 | 6 | 9 |
| n | n | 2n | 3n |



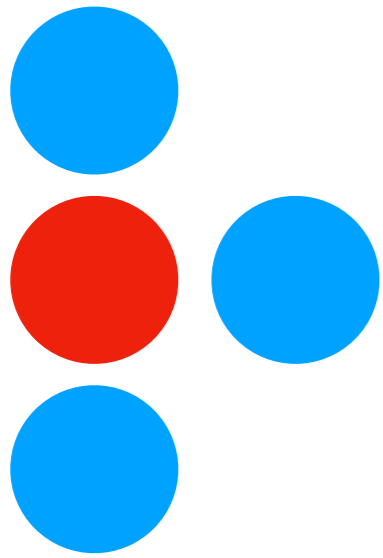
1



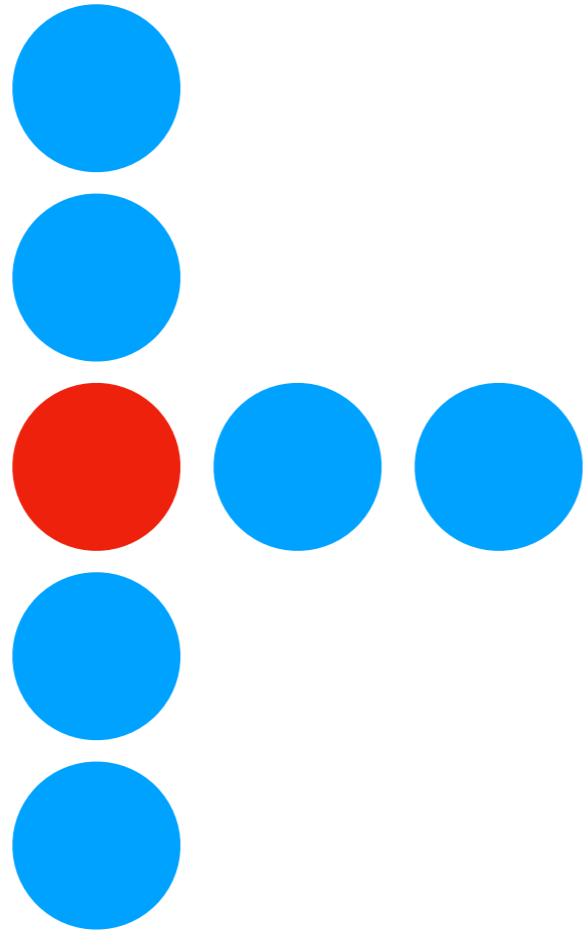
2



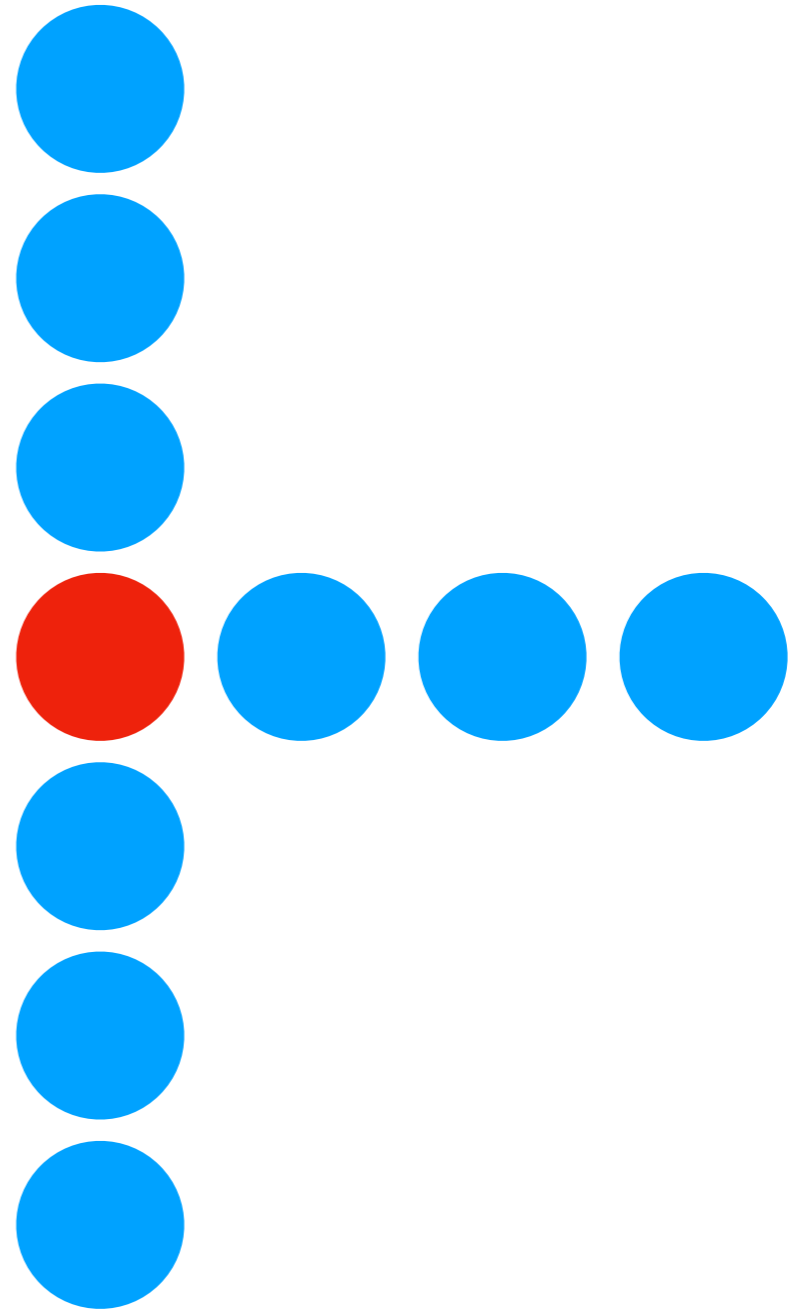
3



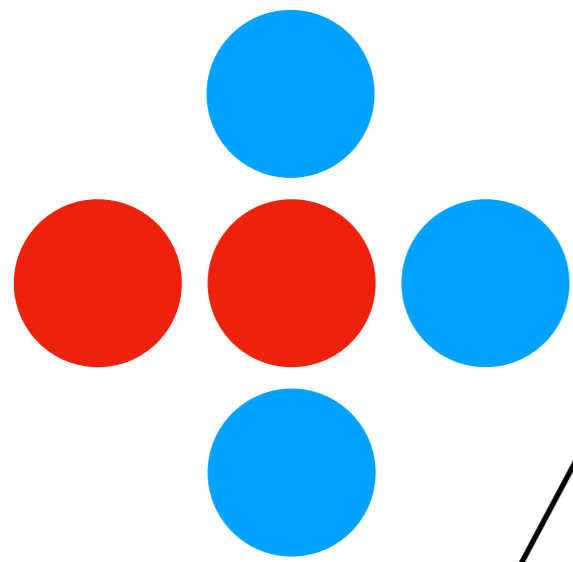
1



2



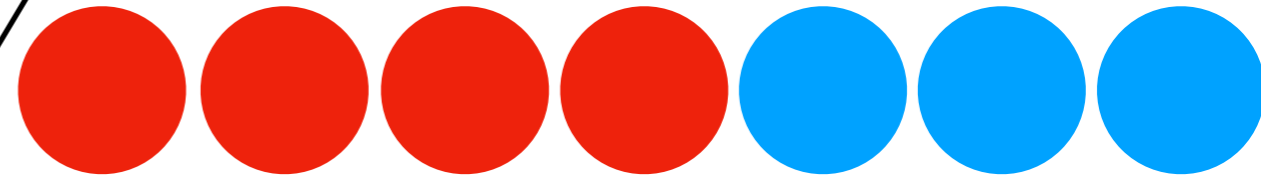
3



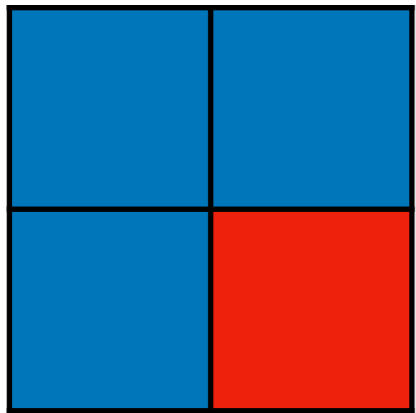
1



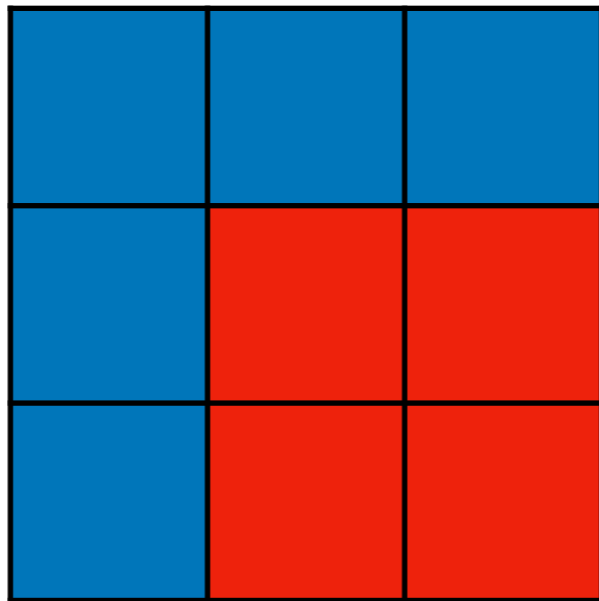
2



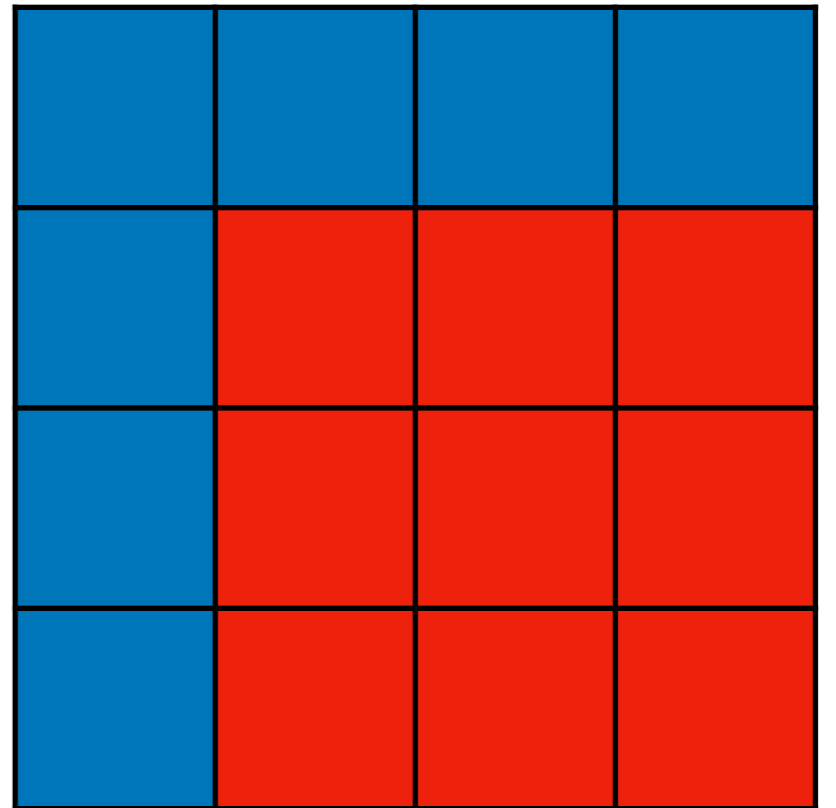
3



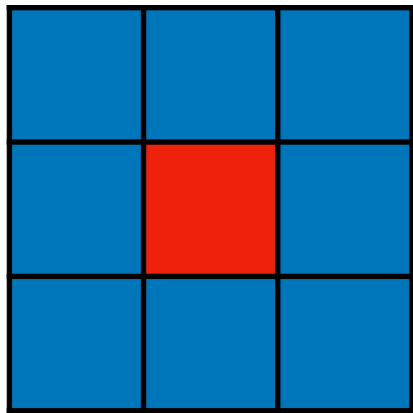
1



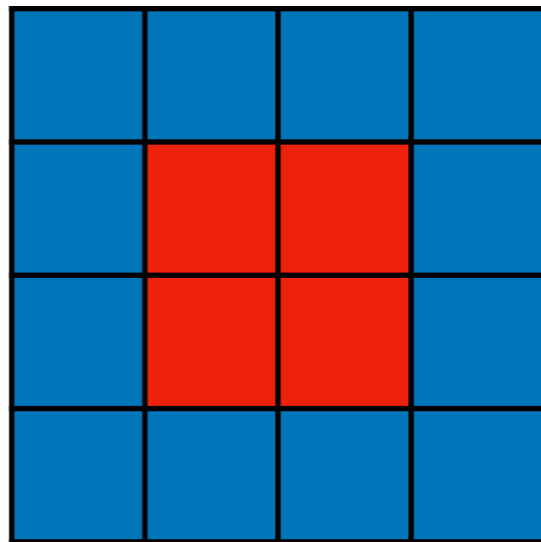
2



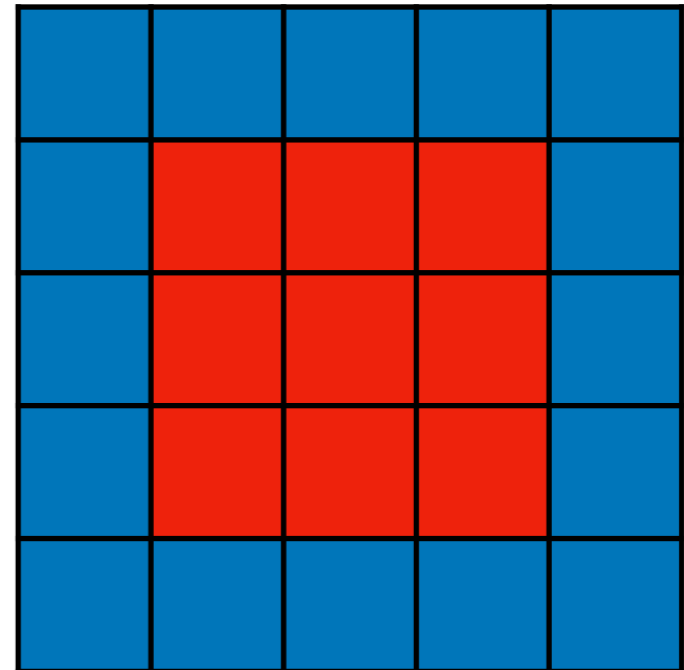
3



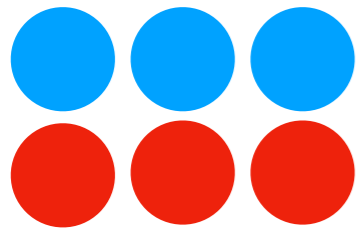
1



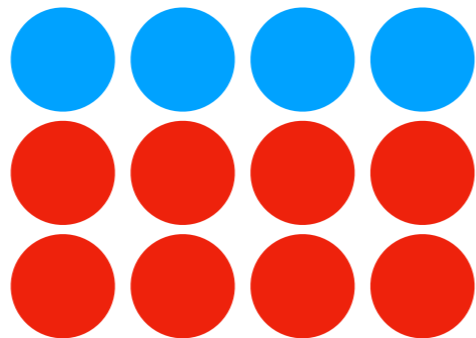
2



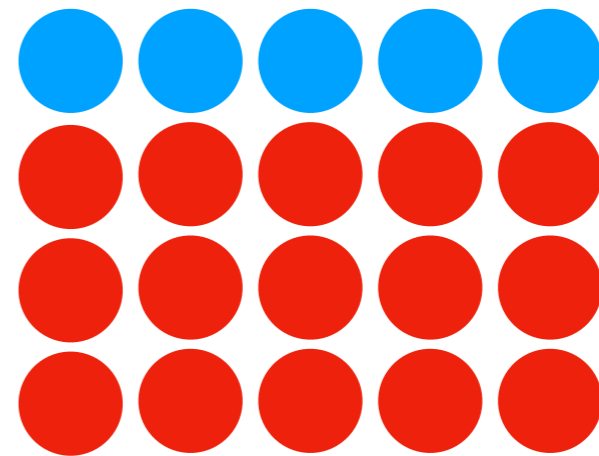
3



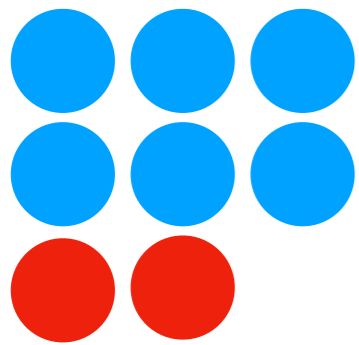
1



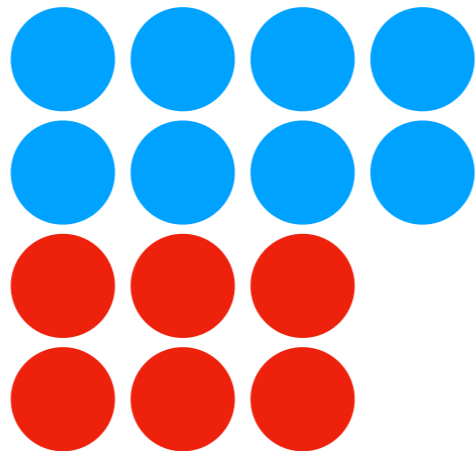
2



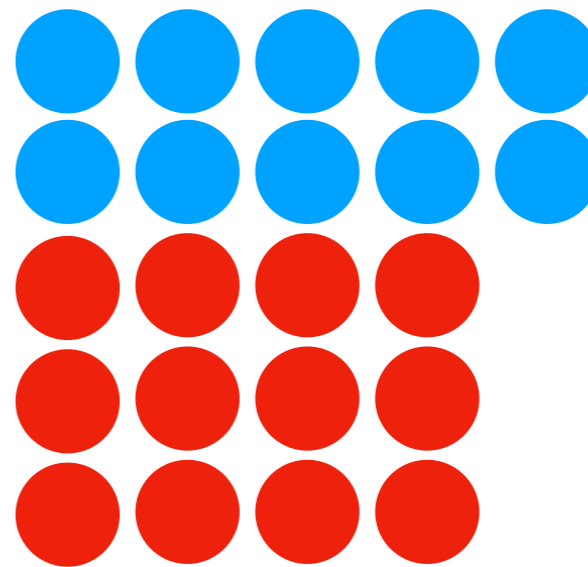
3



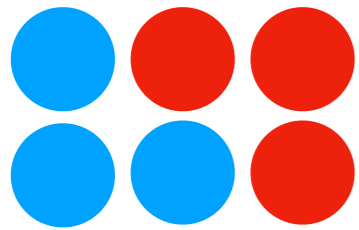
1



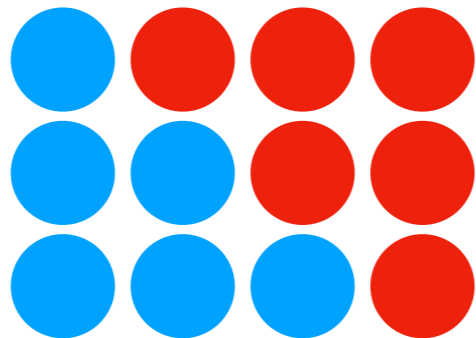
2



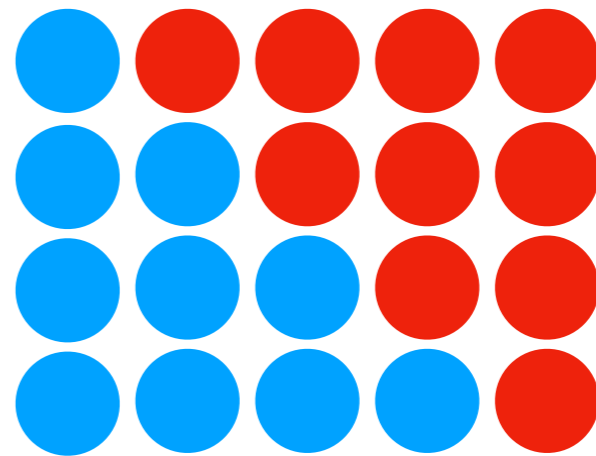
3



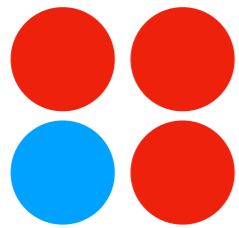
1



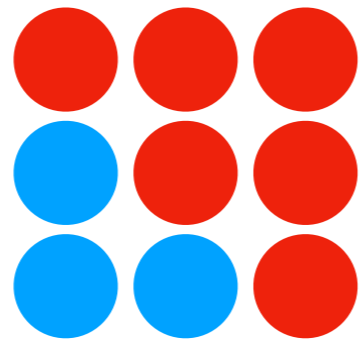
2



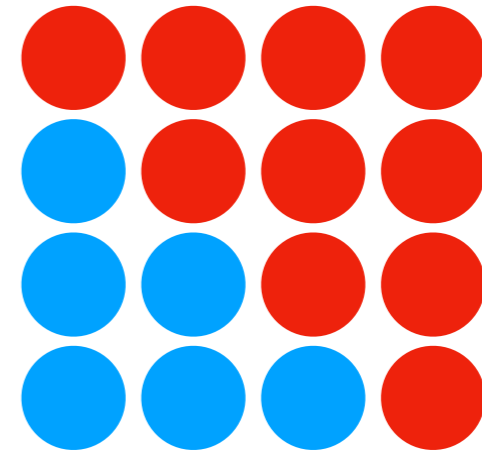
3



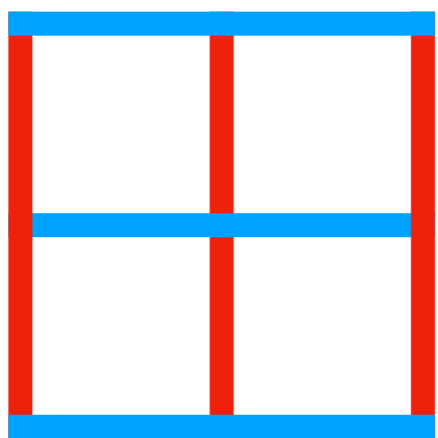
1



2

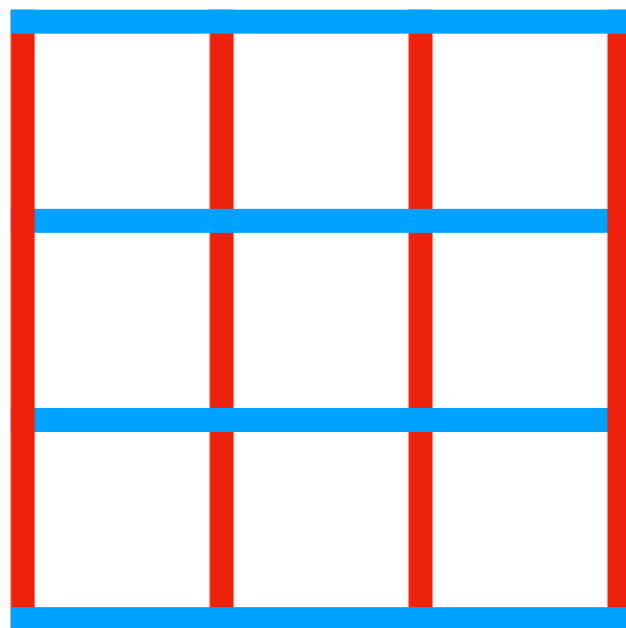


3

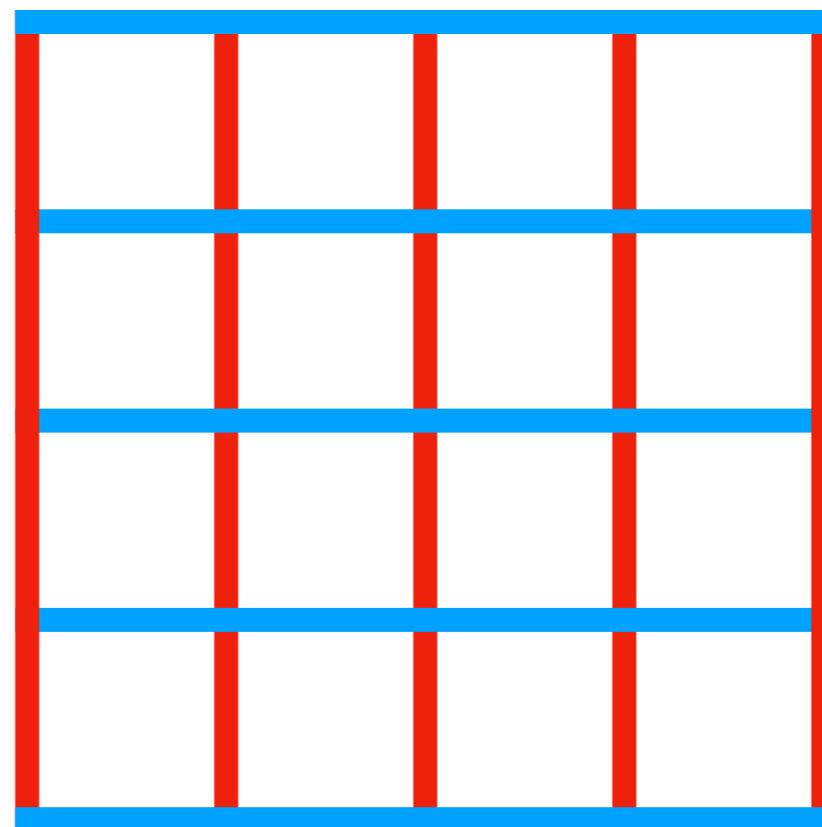


6 blue
6 red

1

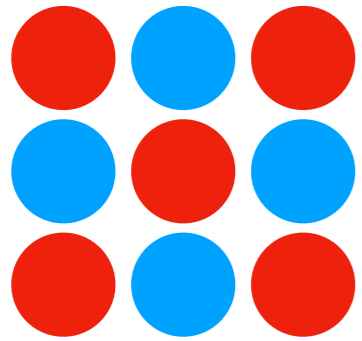


2

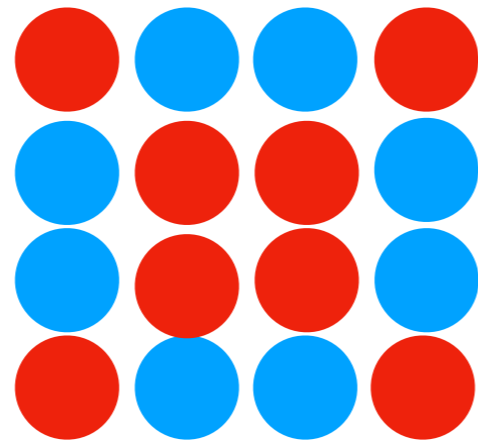


3

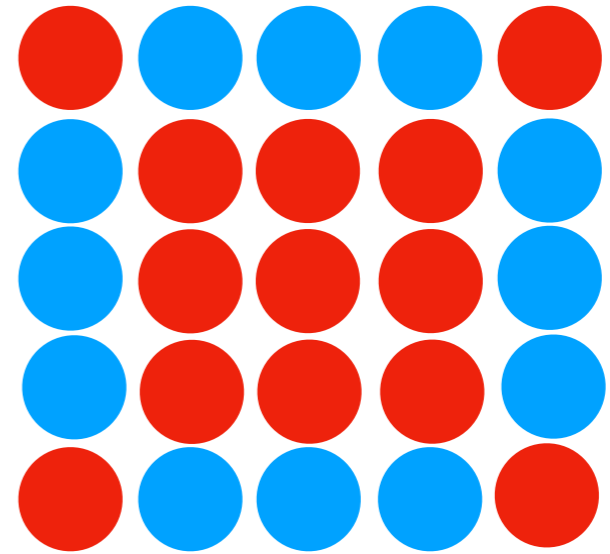
Hint: In this one, count unit edges



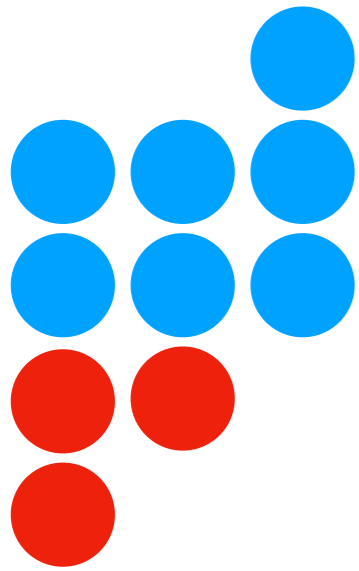
1



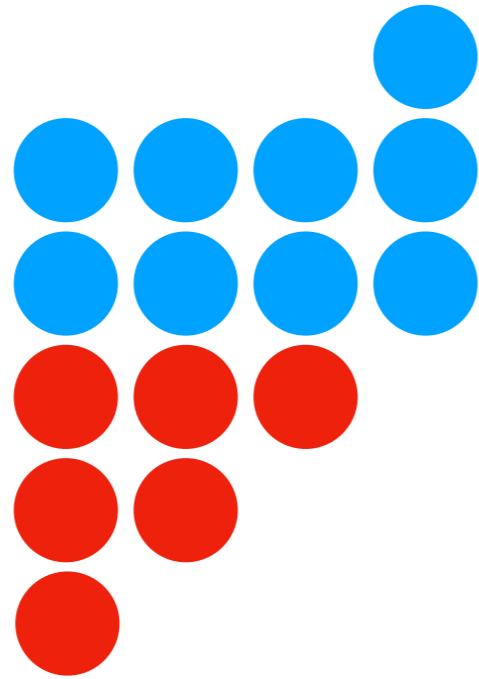
2



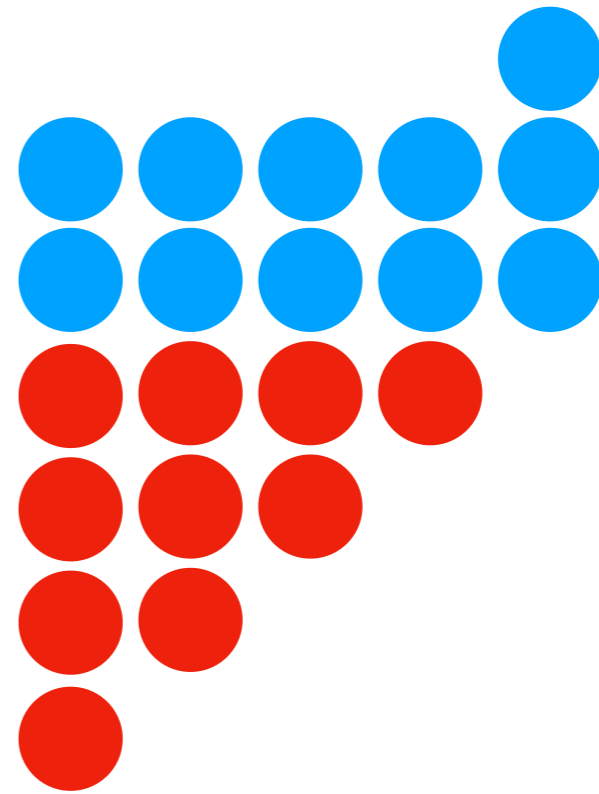
3



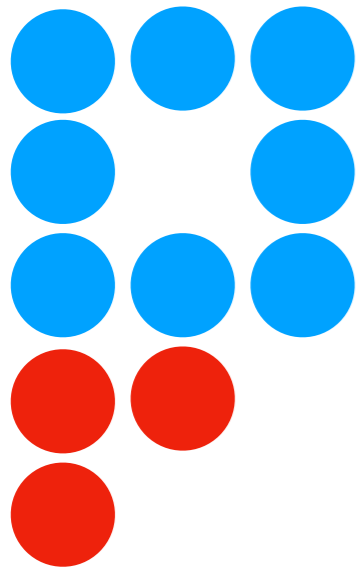
1



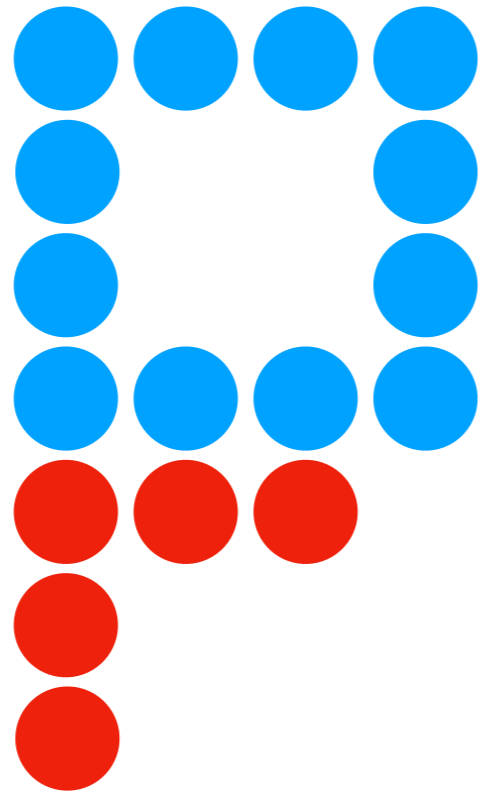
2



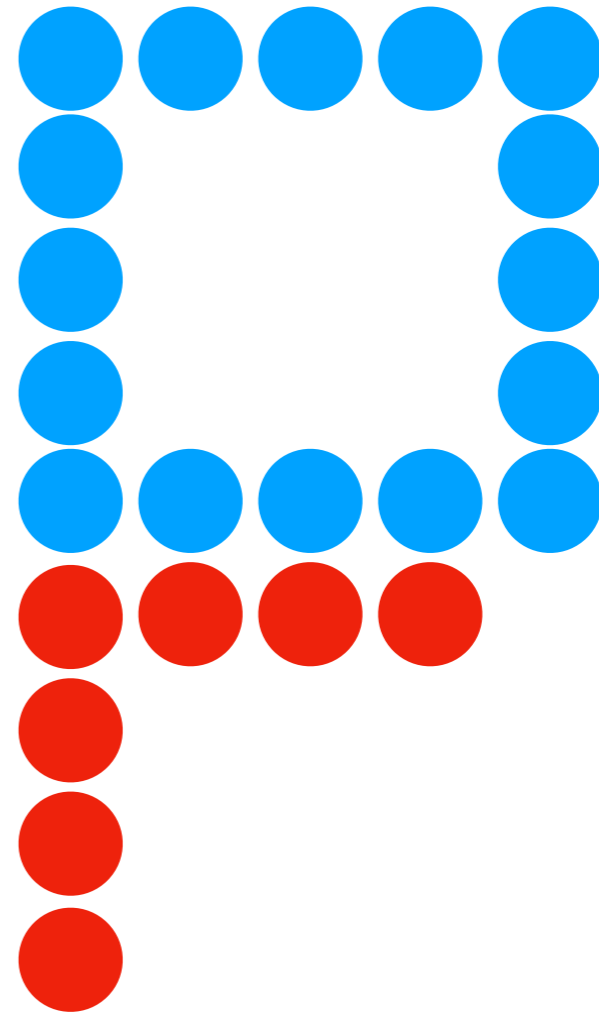
3



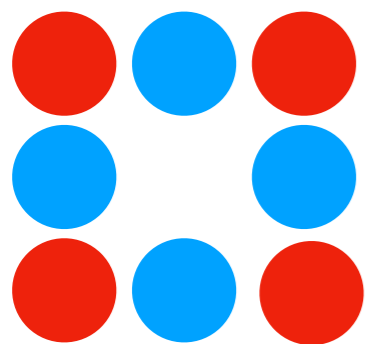
1



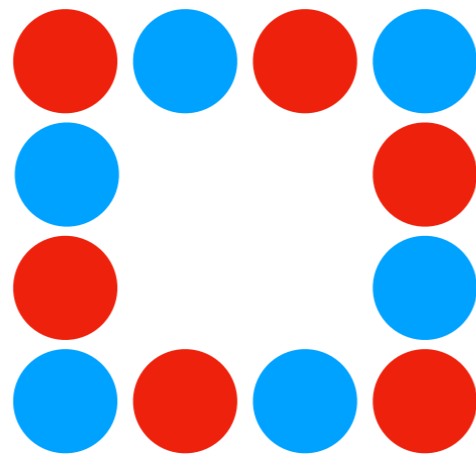
2



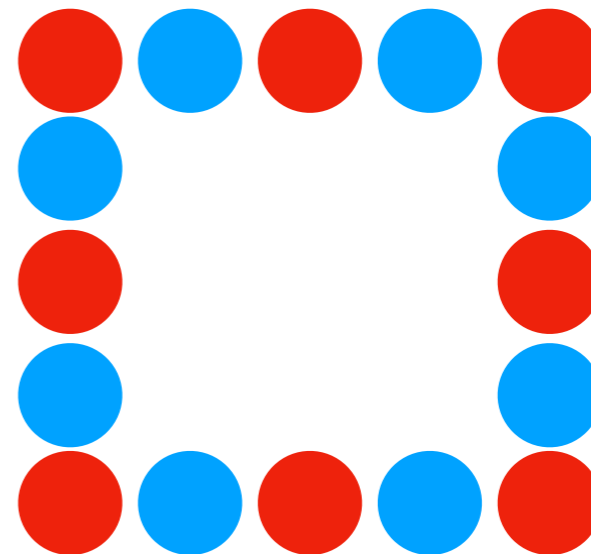
3



1



2



3