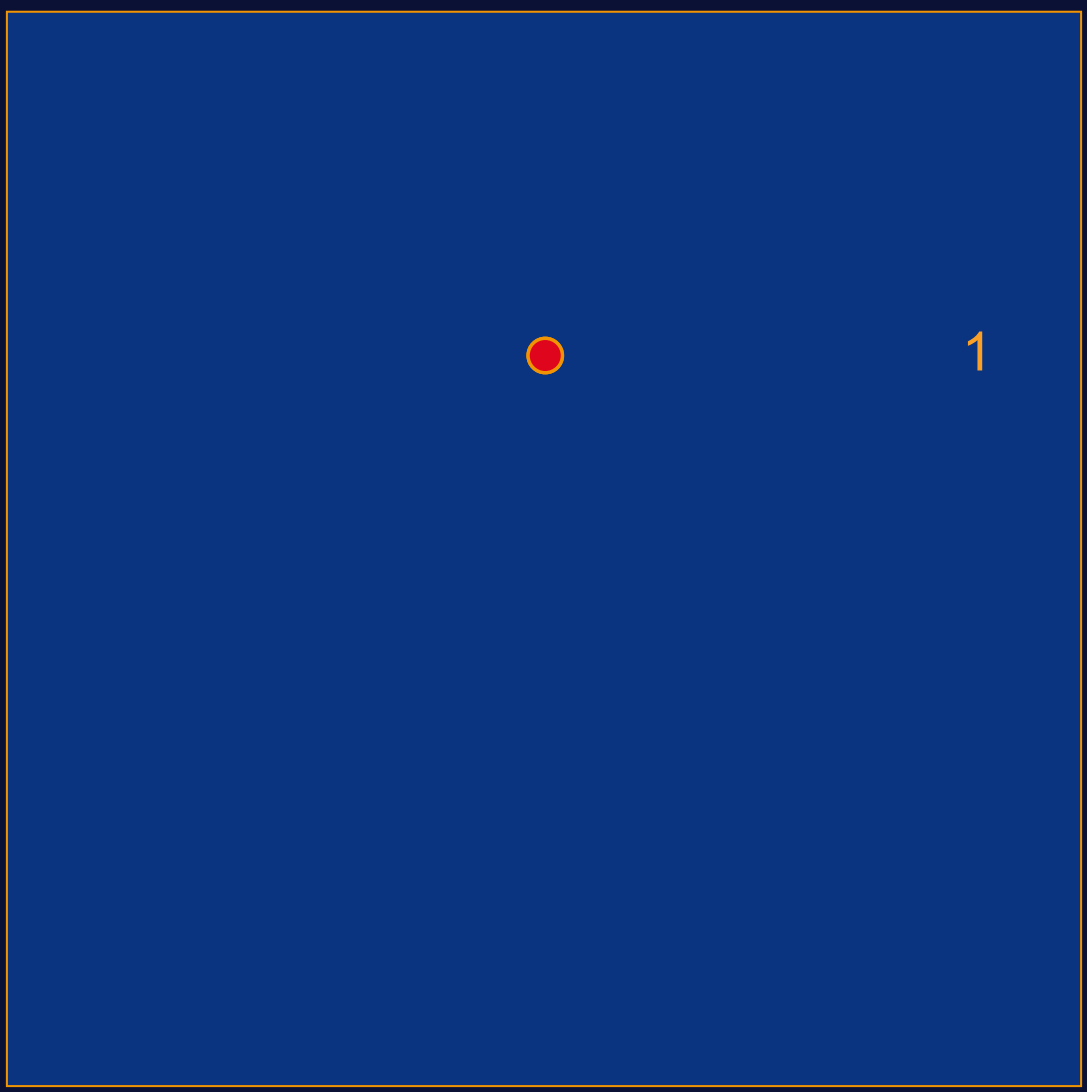
Mathematik?
Spiel!

1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + ... + n

eugenjost@bluewin.ch

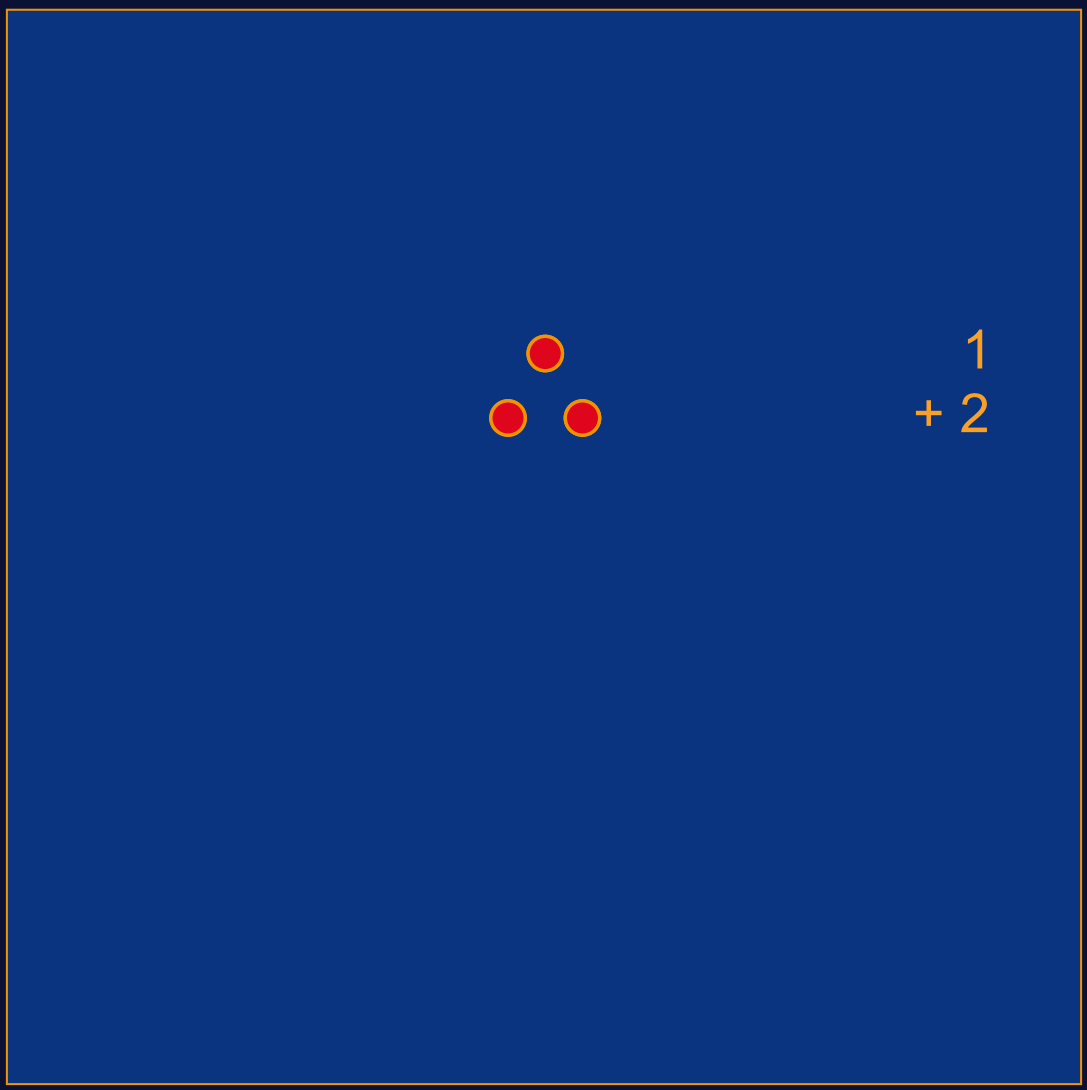
3

$1 + 2 + 3 + \ldots + n$



5

$1 + 2 + 3 + \ldots + n$



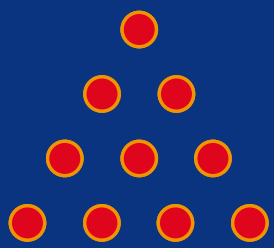
7

$1 + 2 + 3 + \ldots + n$

1
+ 2
+ 3

9

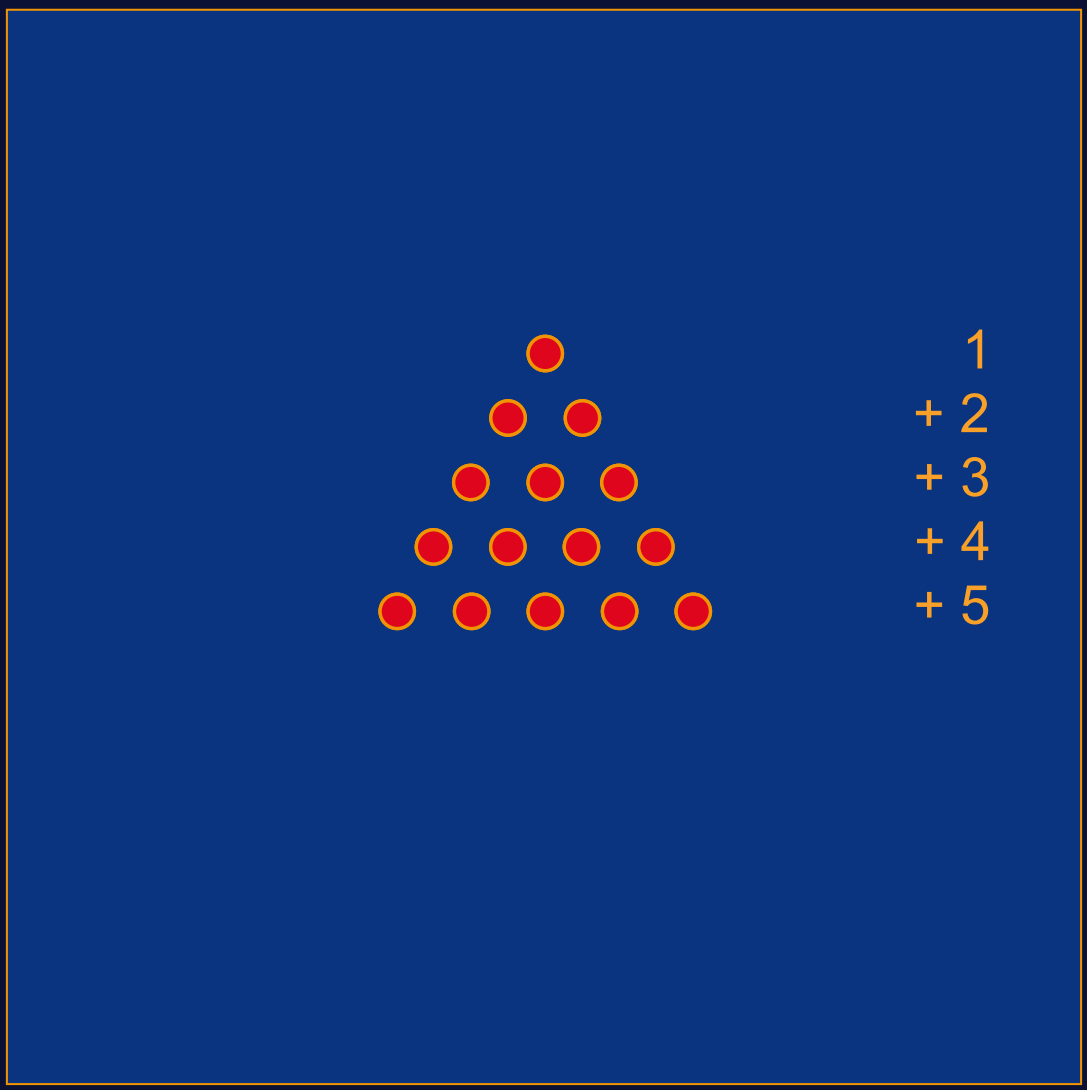
$1 + 2 + 3 + \ldots + n$



1
+ 2
+ 3
+ 4

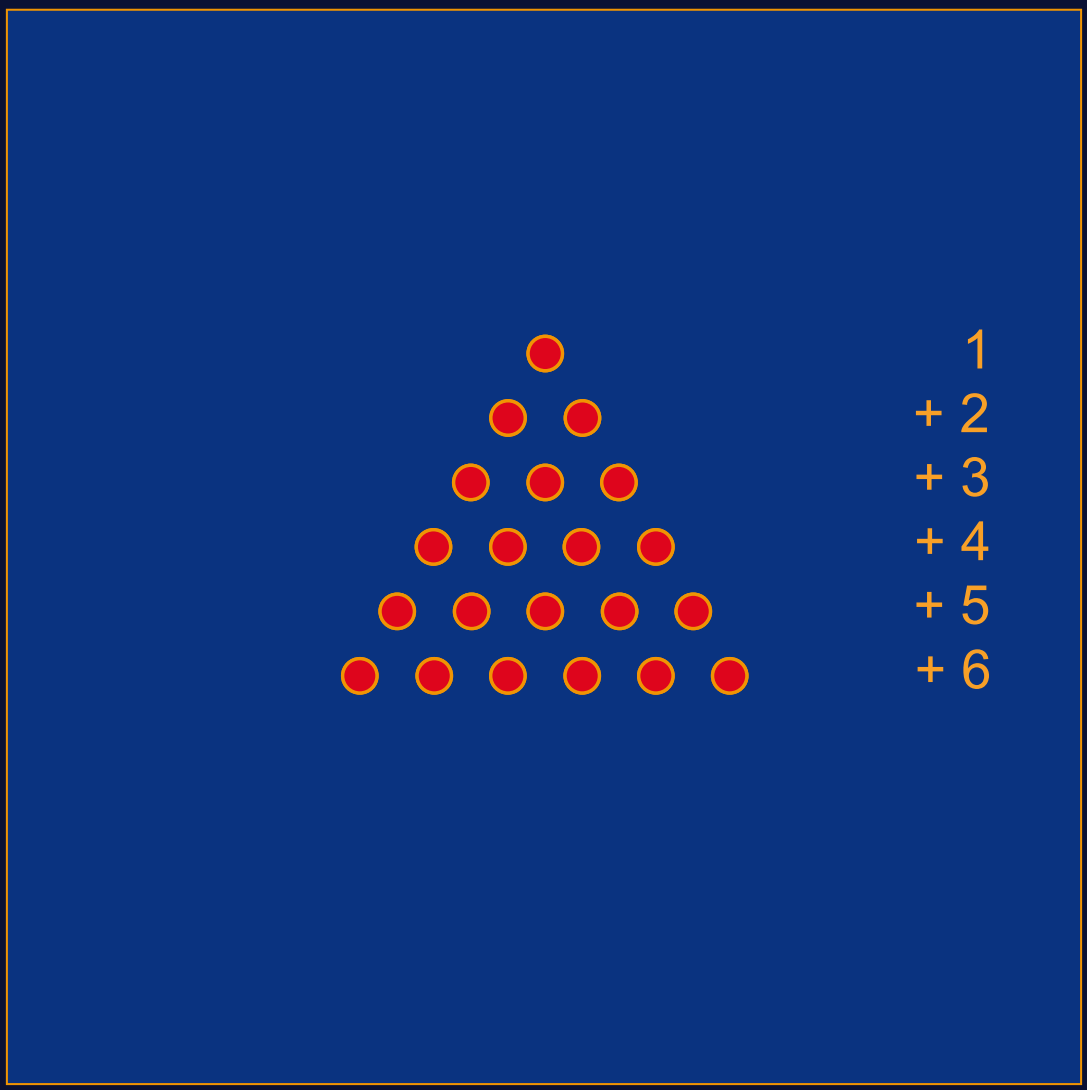
11

$1 + 2 + 3 + \ldots + n$



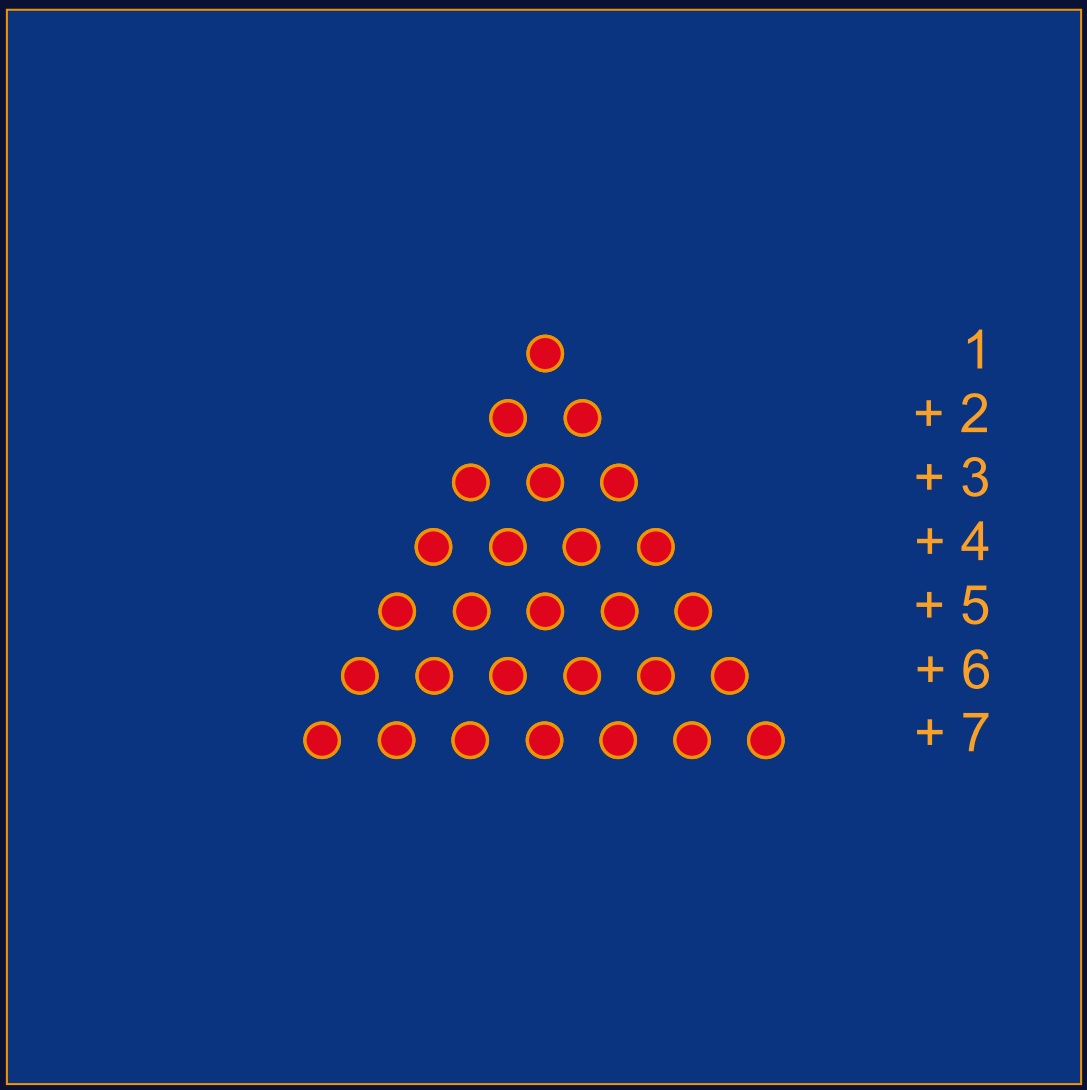
13

$1 + 2 + 3 + \ldots + n$



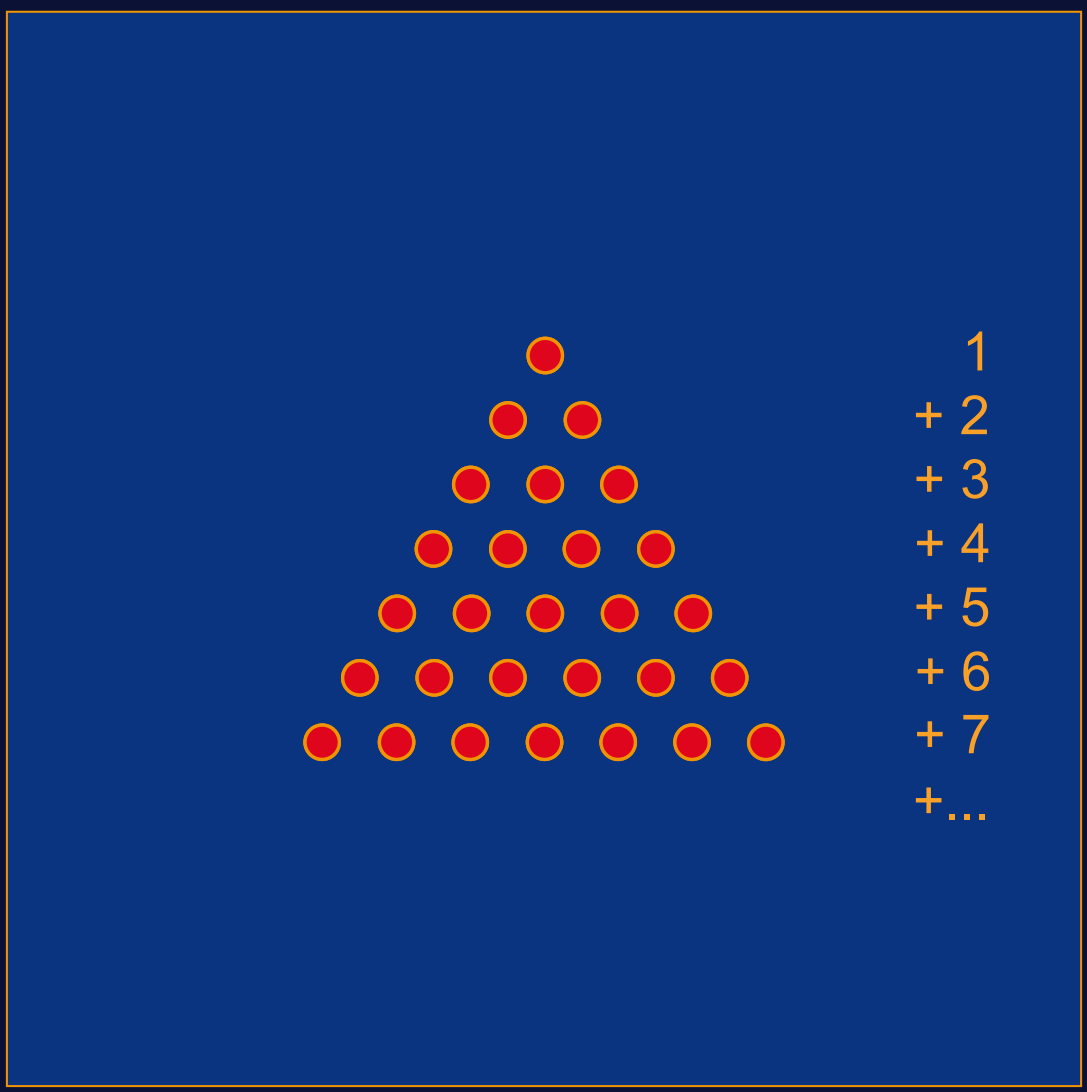
15

$1 + 2 + 3 + \ldots + n$



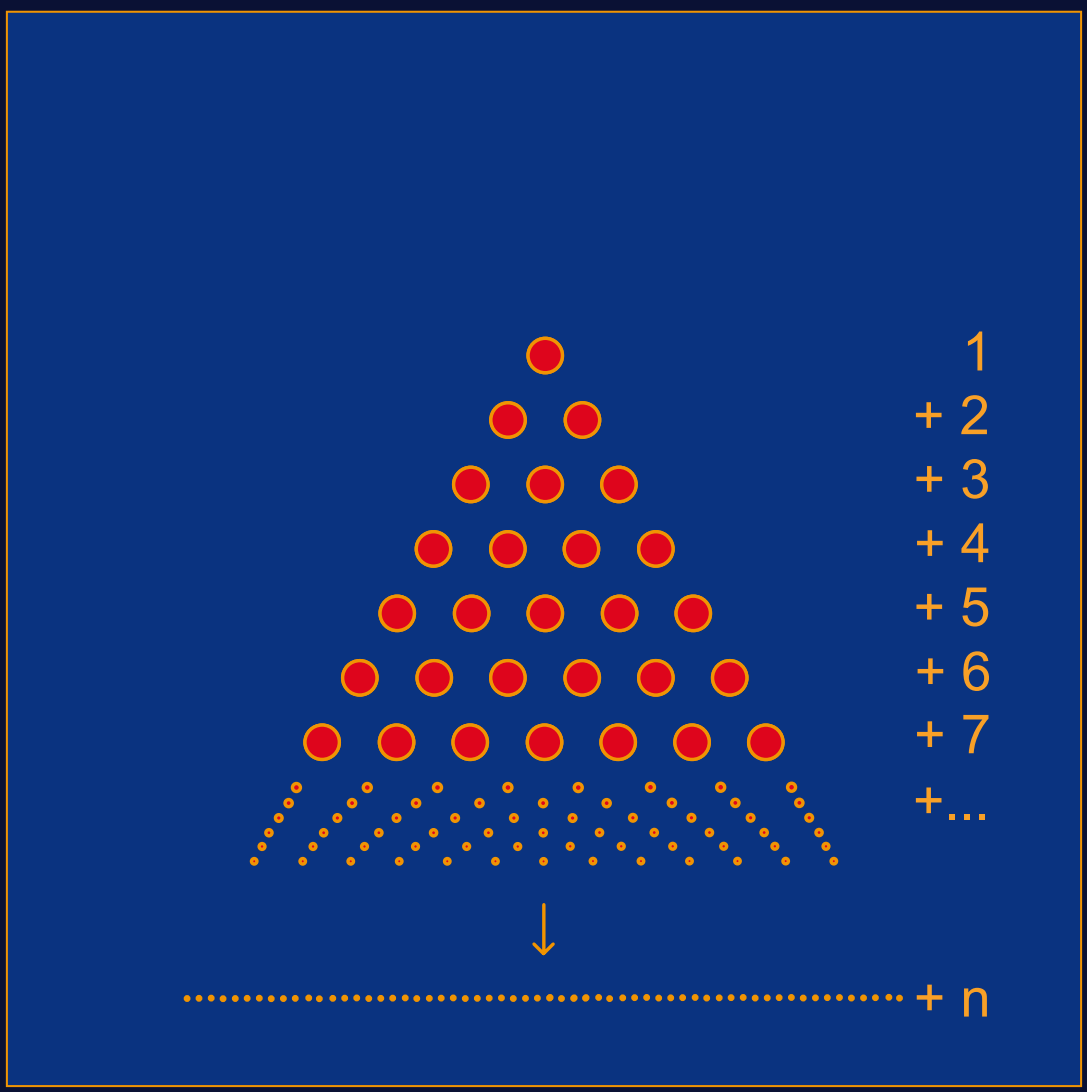
17

$1 + 2 + 3 + \ldots + n$



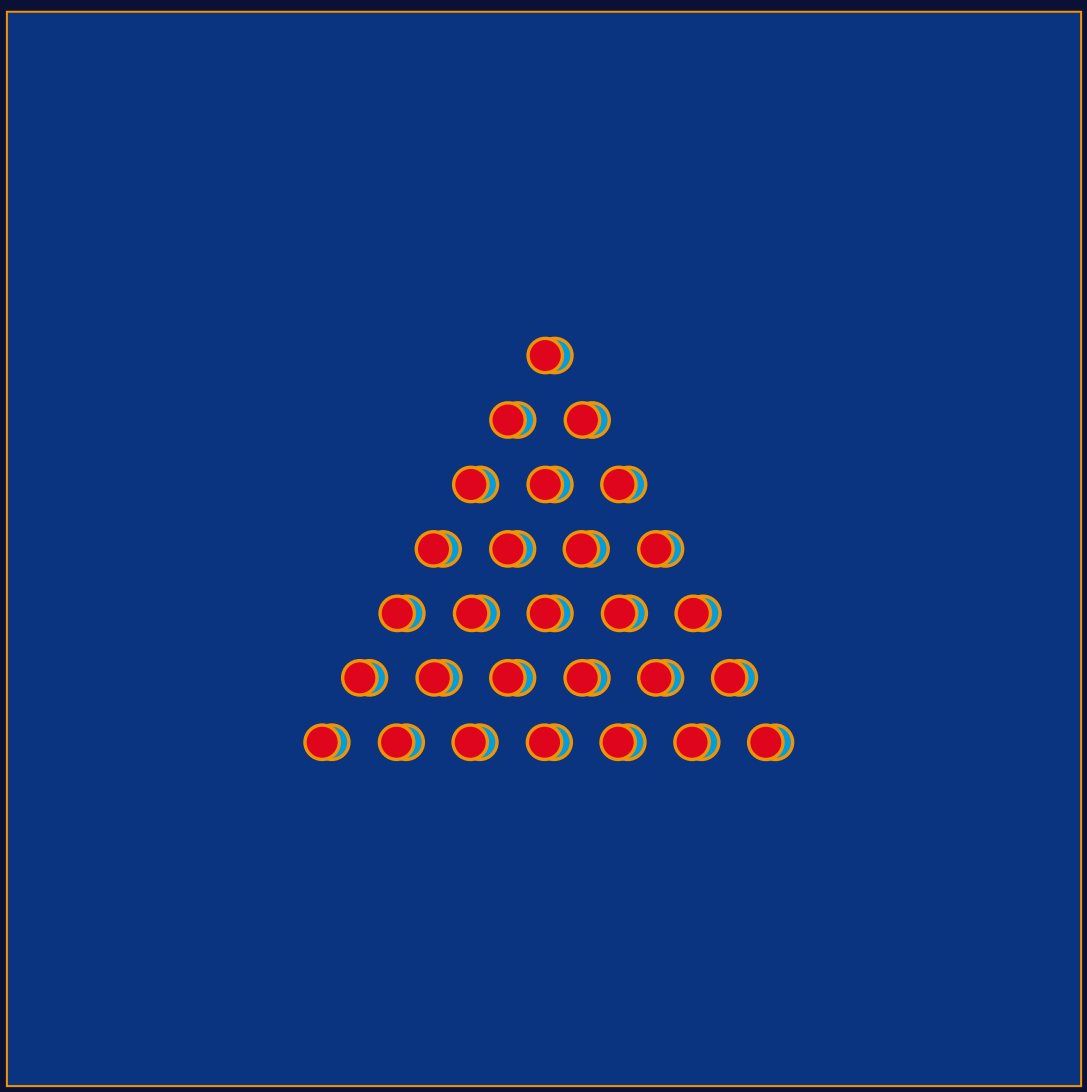
19

$1 + 2 + 3 + \ldots + n$



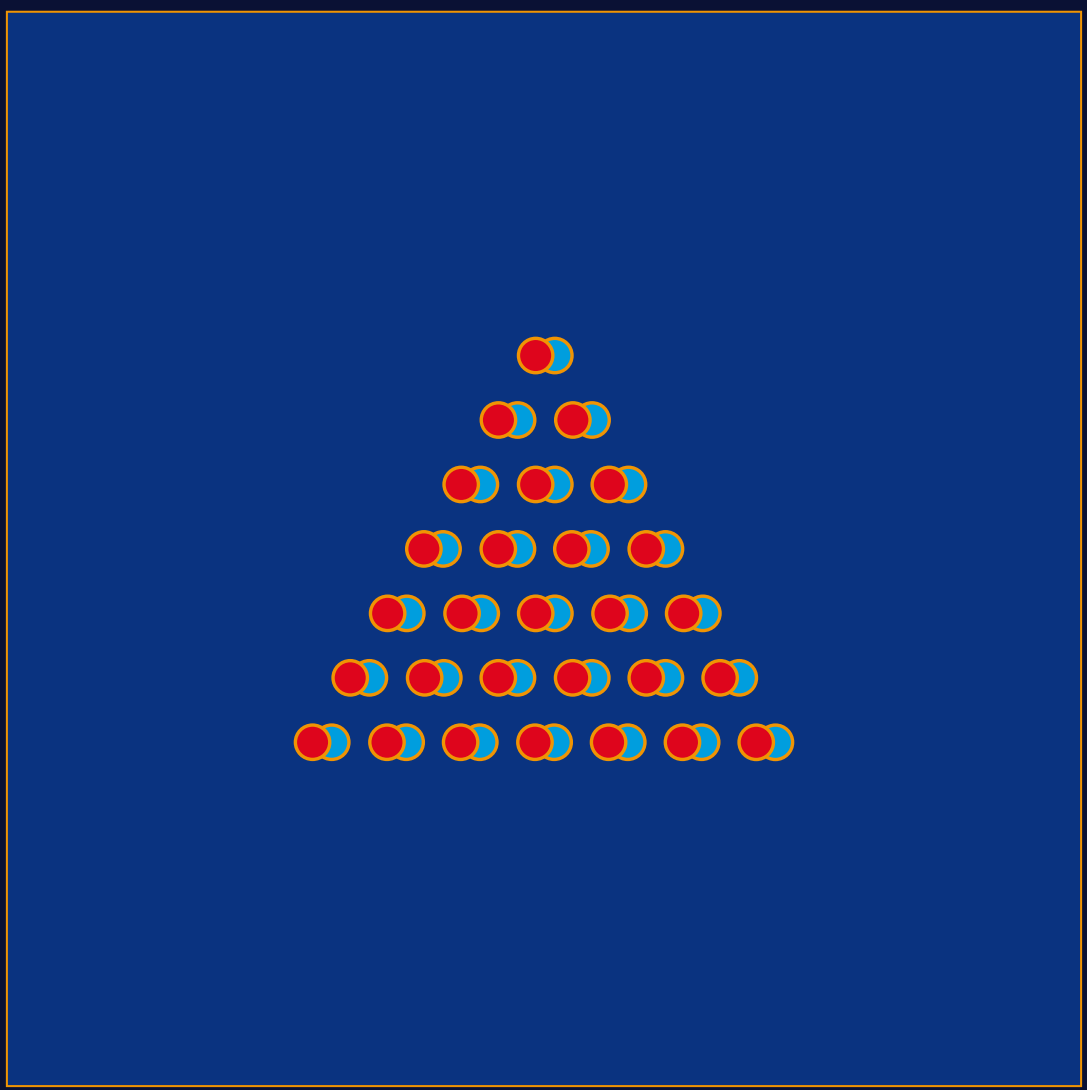
21

$1 + 2 + 3 + \ldots + n$



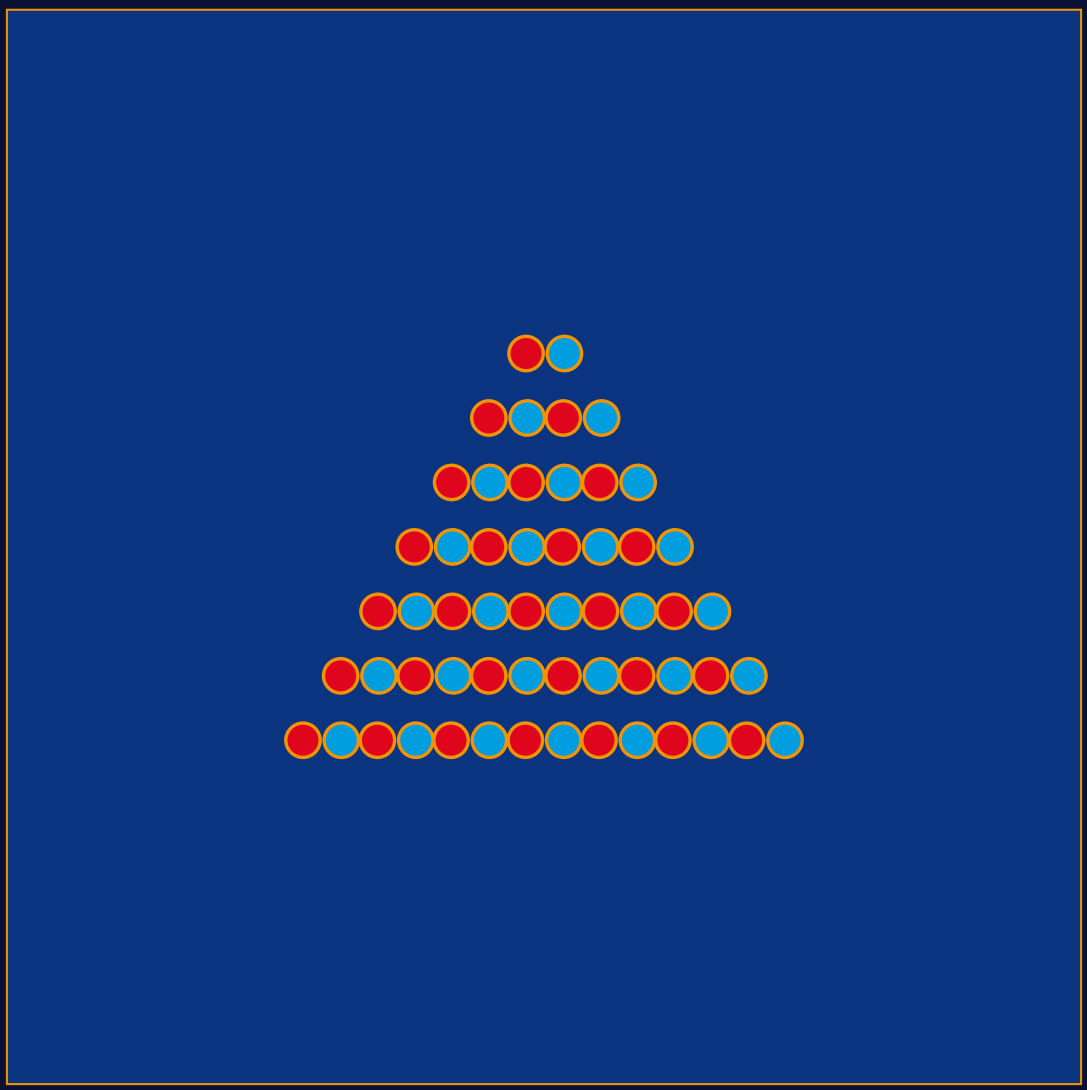
23

$1 + 2 + 3 + \ldots + n$



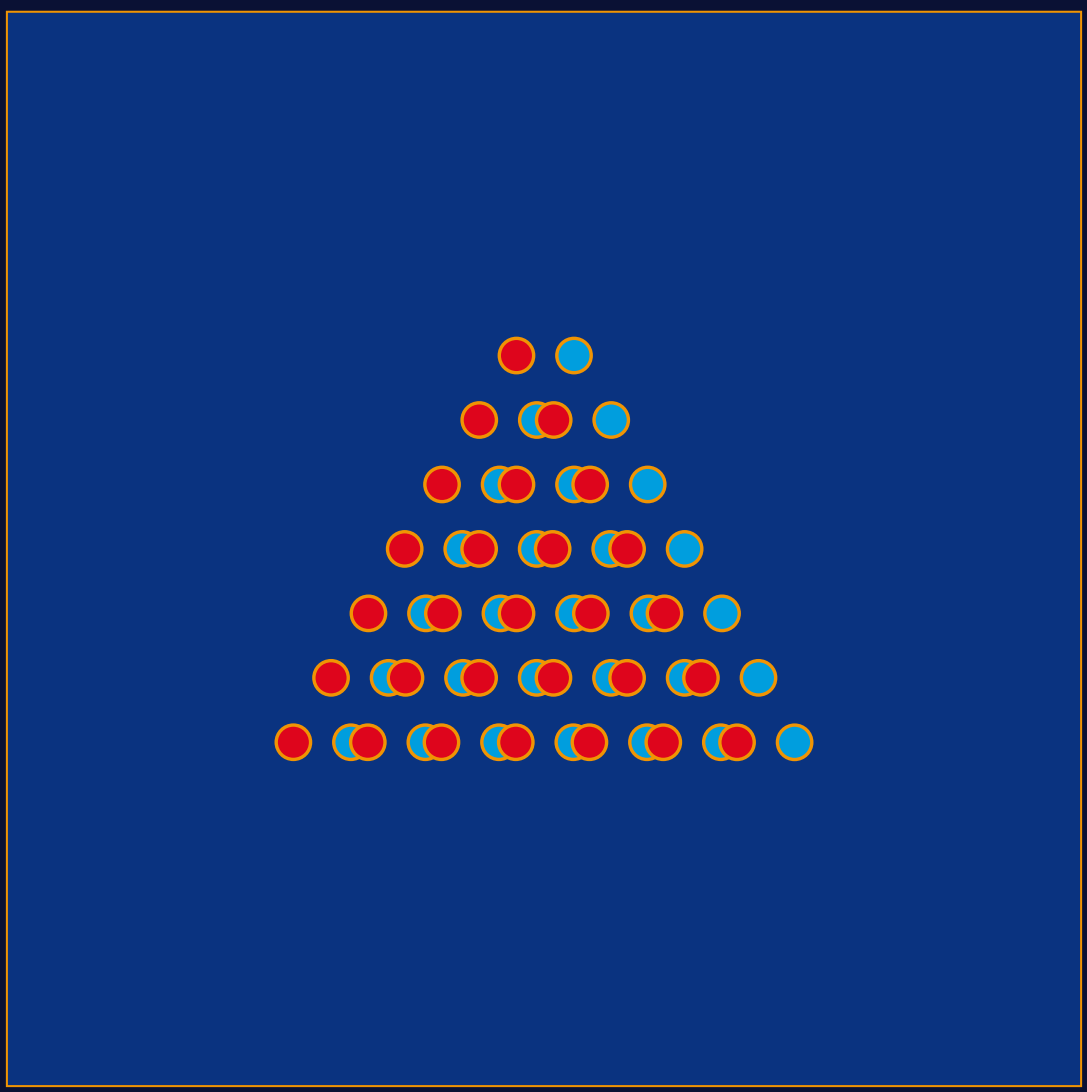
25

$1 + 2 + 3 + \ldots + n$



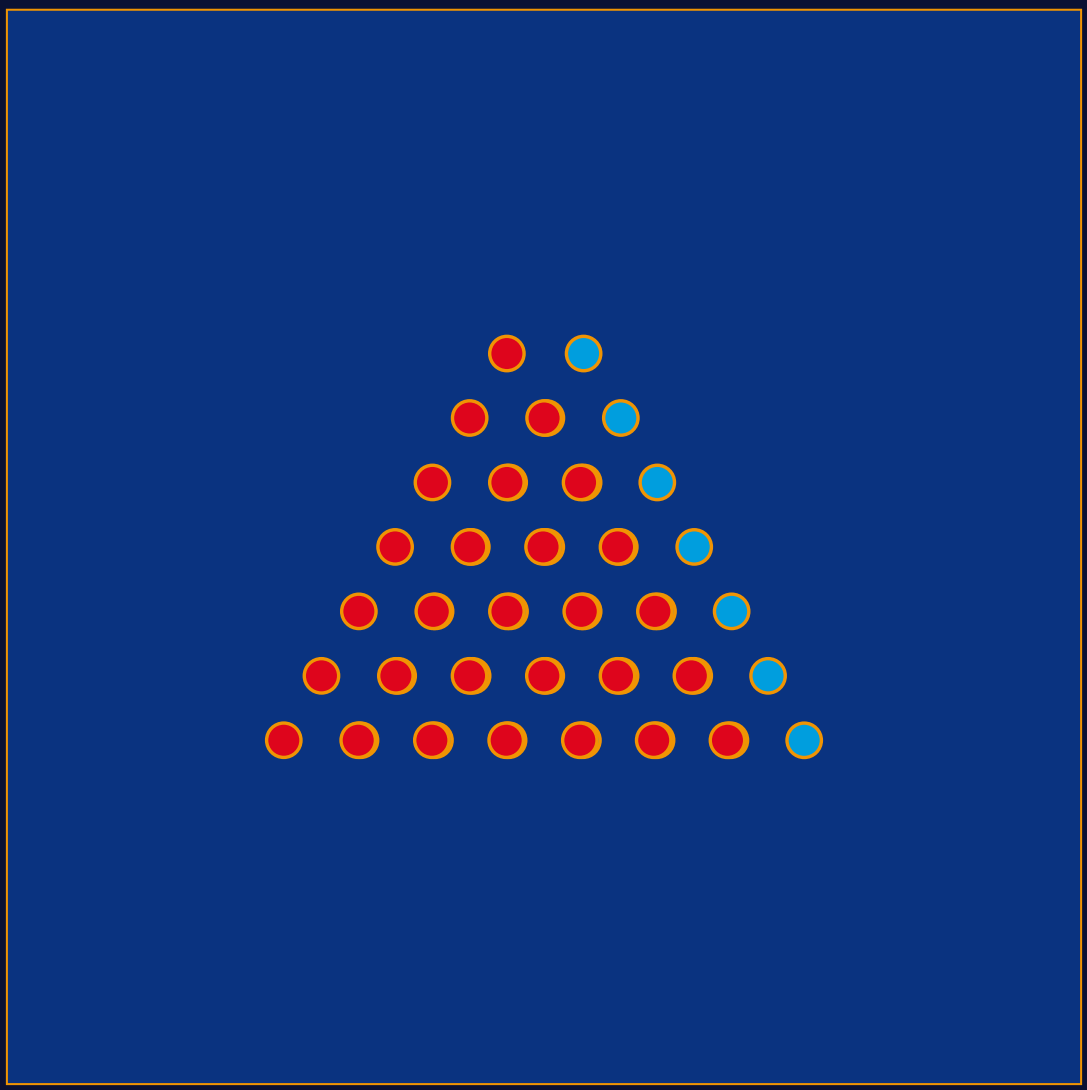
27

$1 + 2 + 3 + \ldots + n$



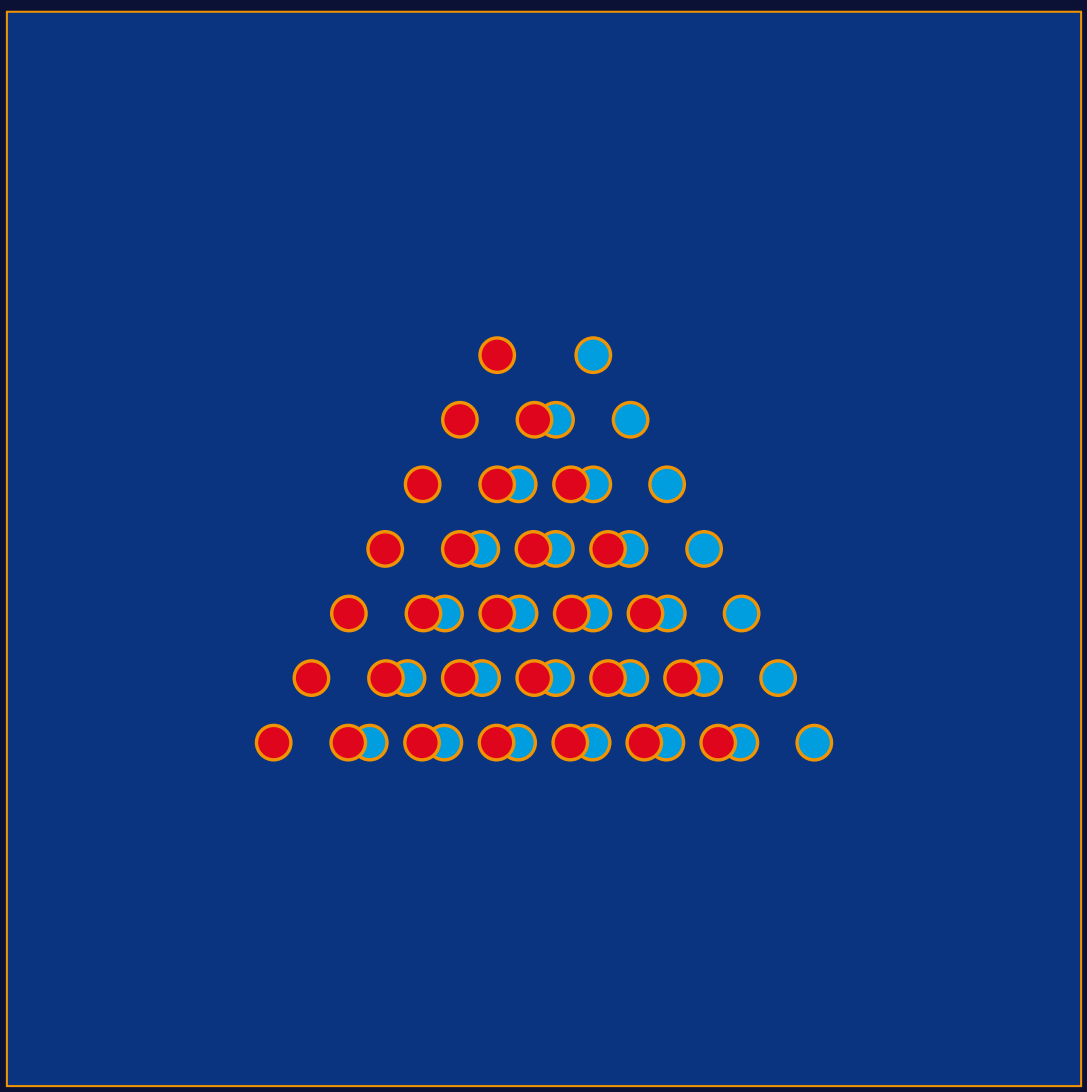
29

$1 + 2 + 3 + \ldots + n$



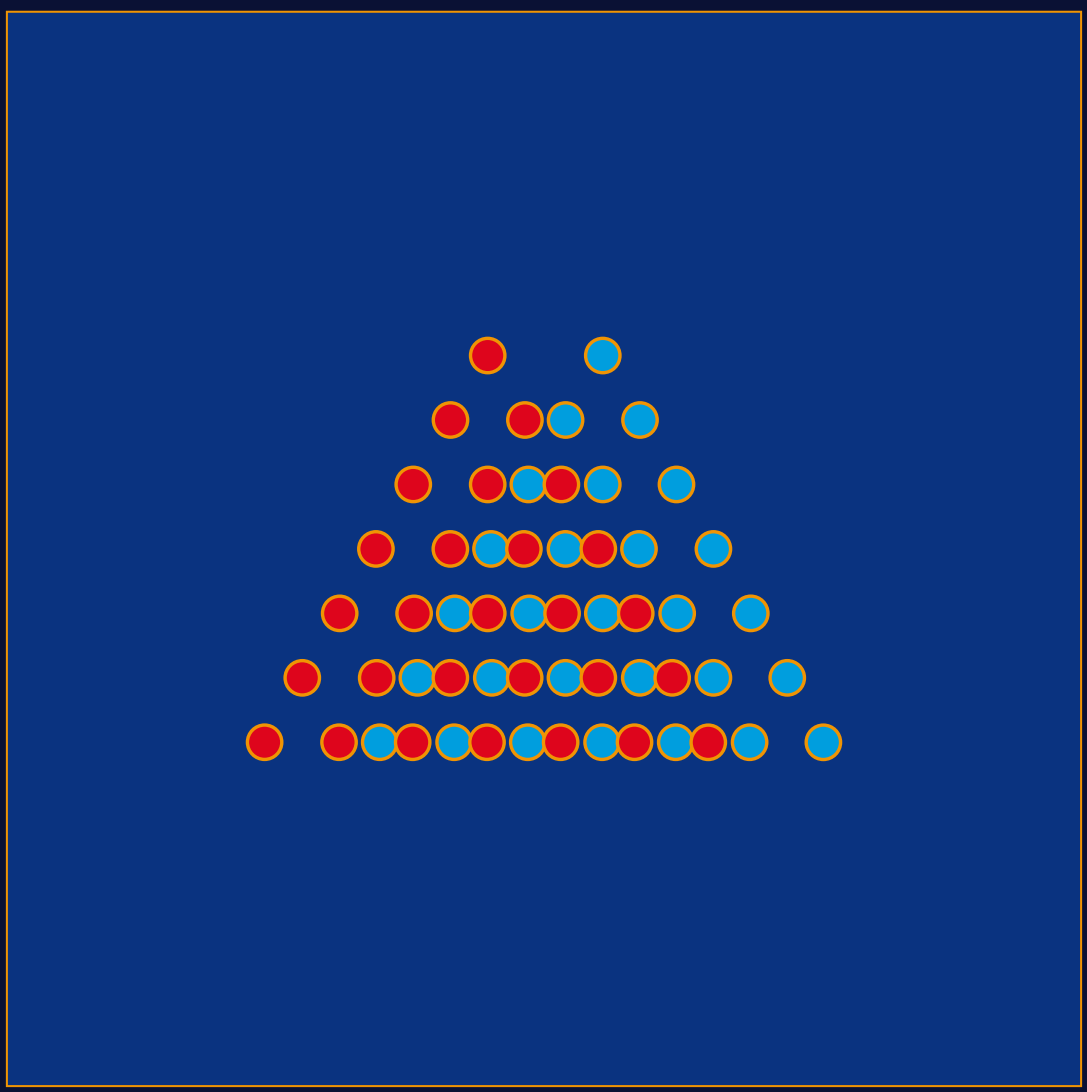
31

$1 + 2 + 3 + \ldots + n$



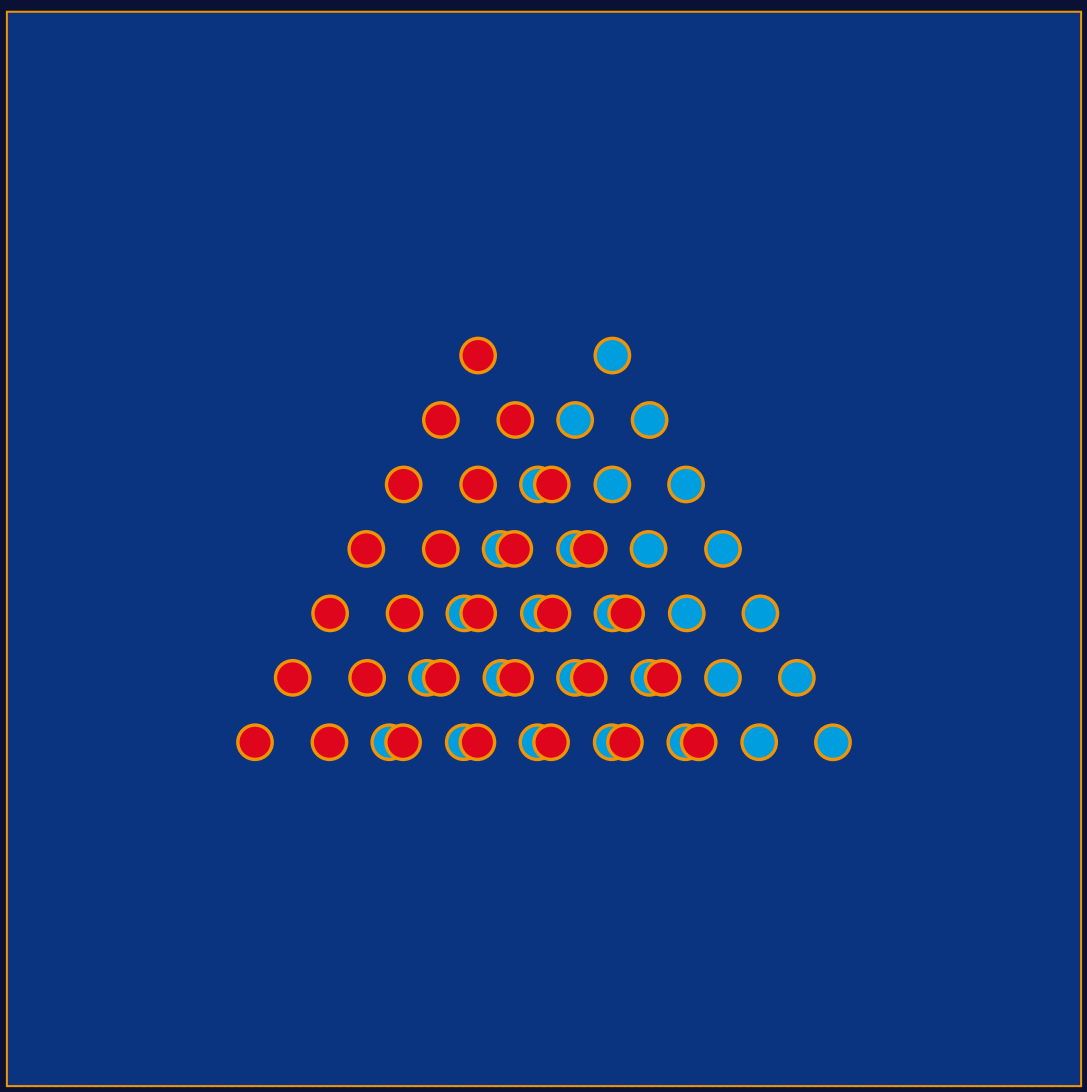
33

$1 + 2 + 3 + \ldots + n$



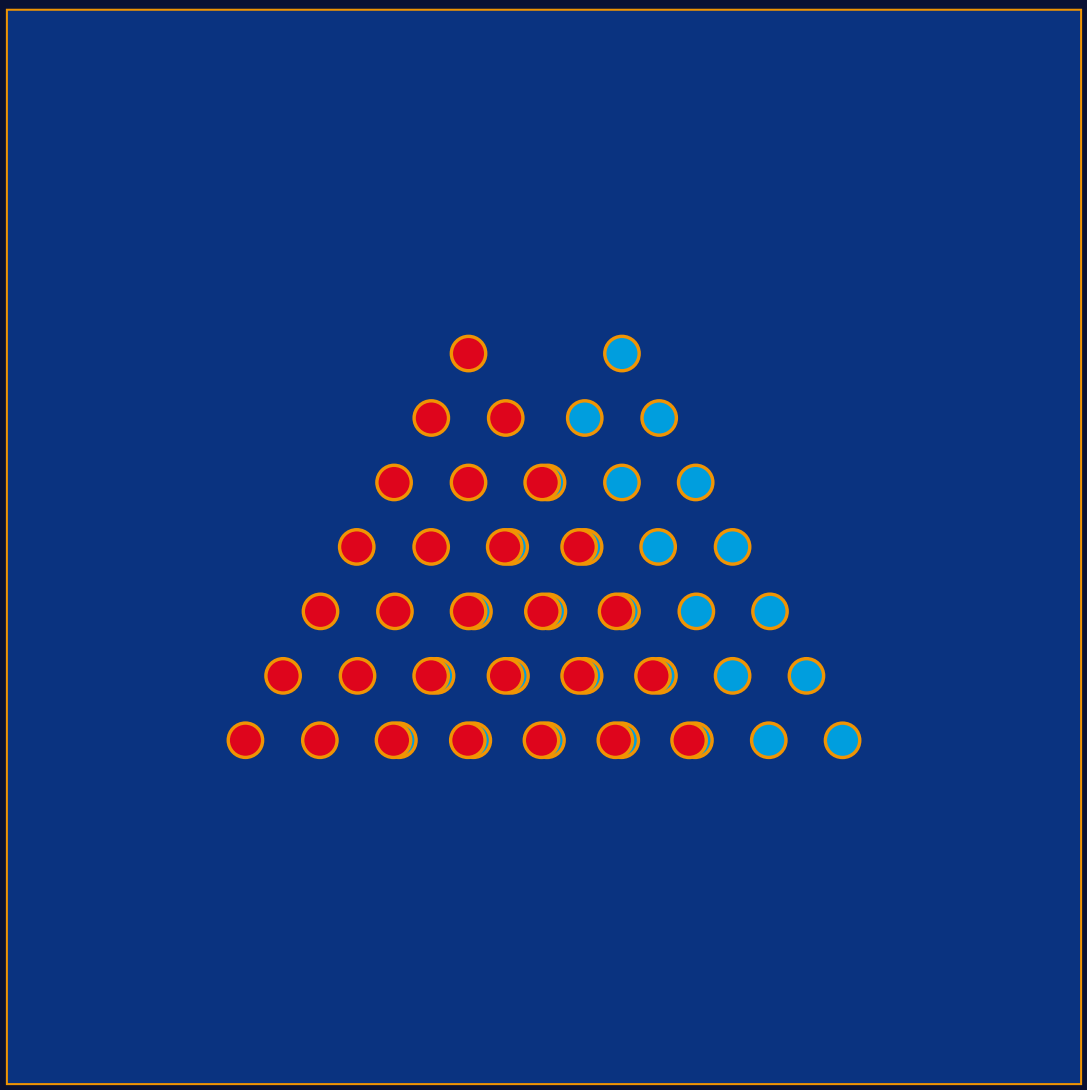
35

$1 + 2 + 3 + \ldots + n$



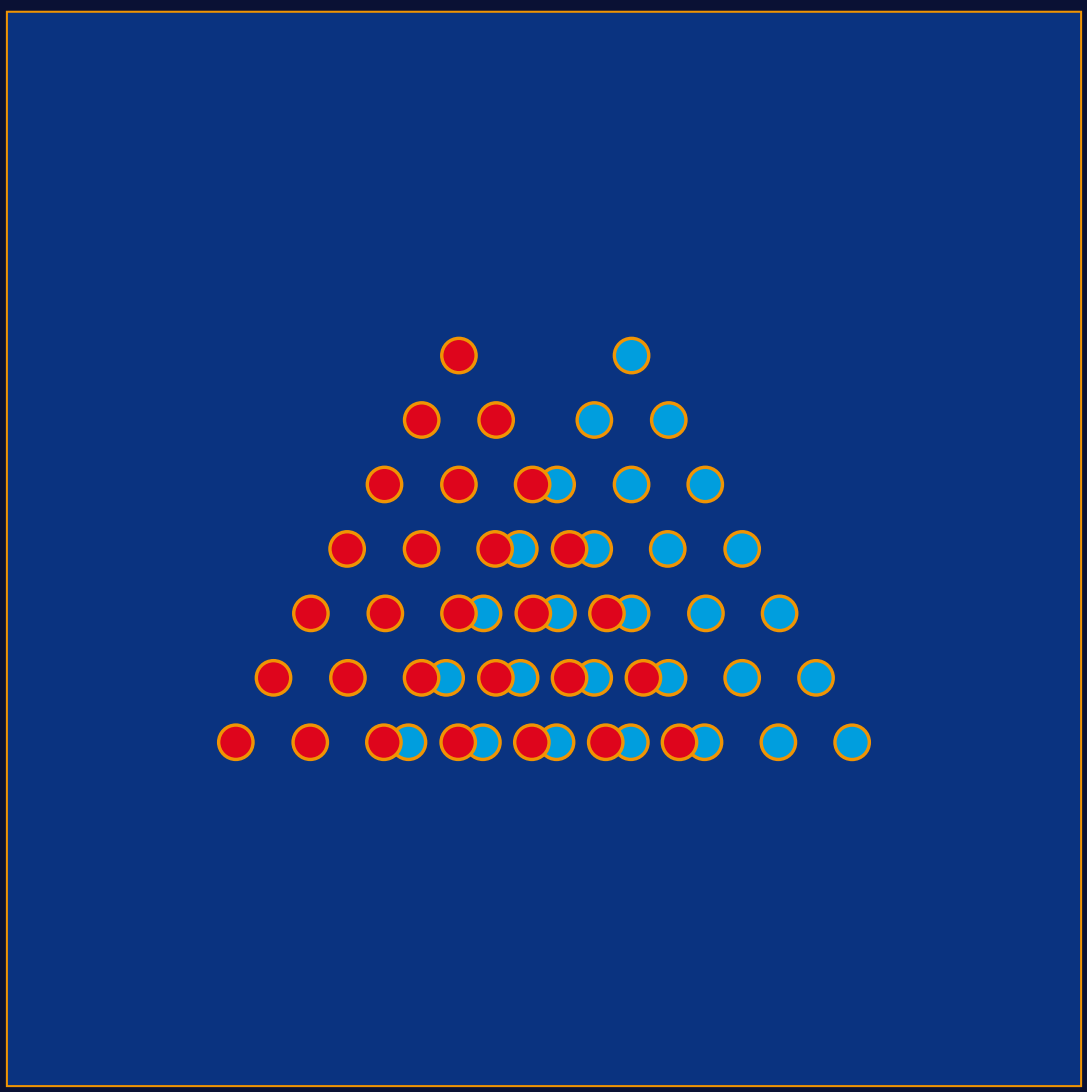
37

$1 + 2 + 3 + \ldots + n$



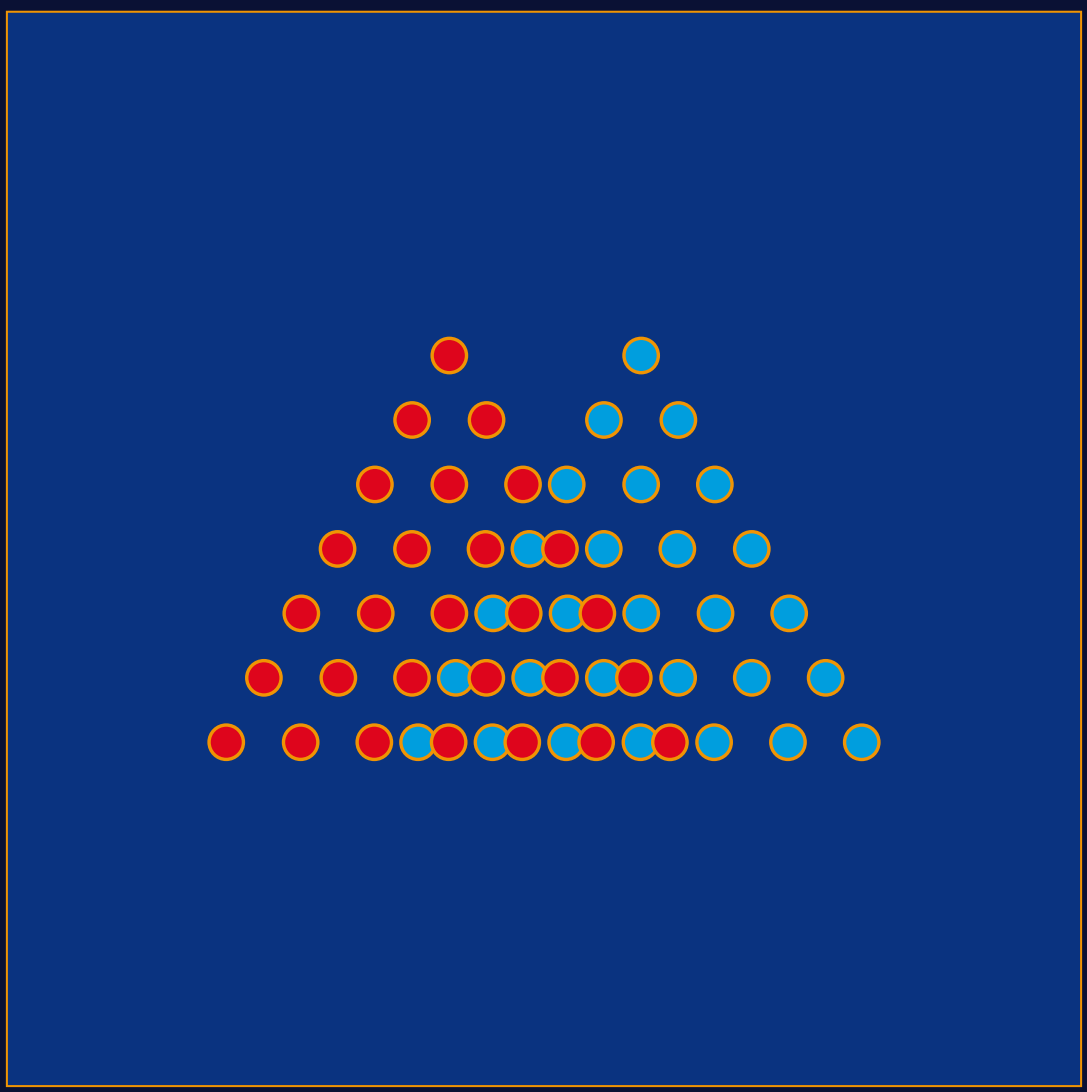
39

$1 + 2 + 3 + \ldots + n$

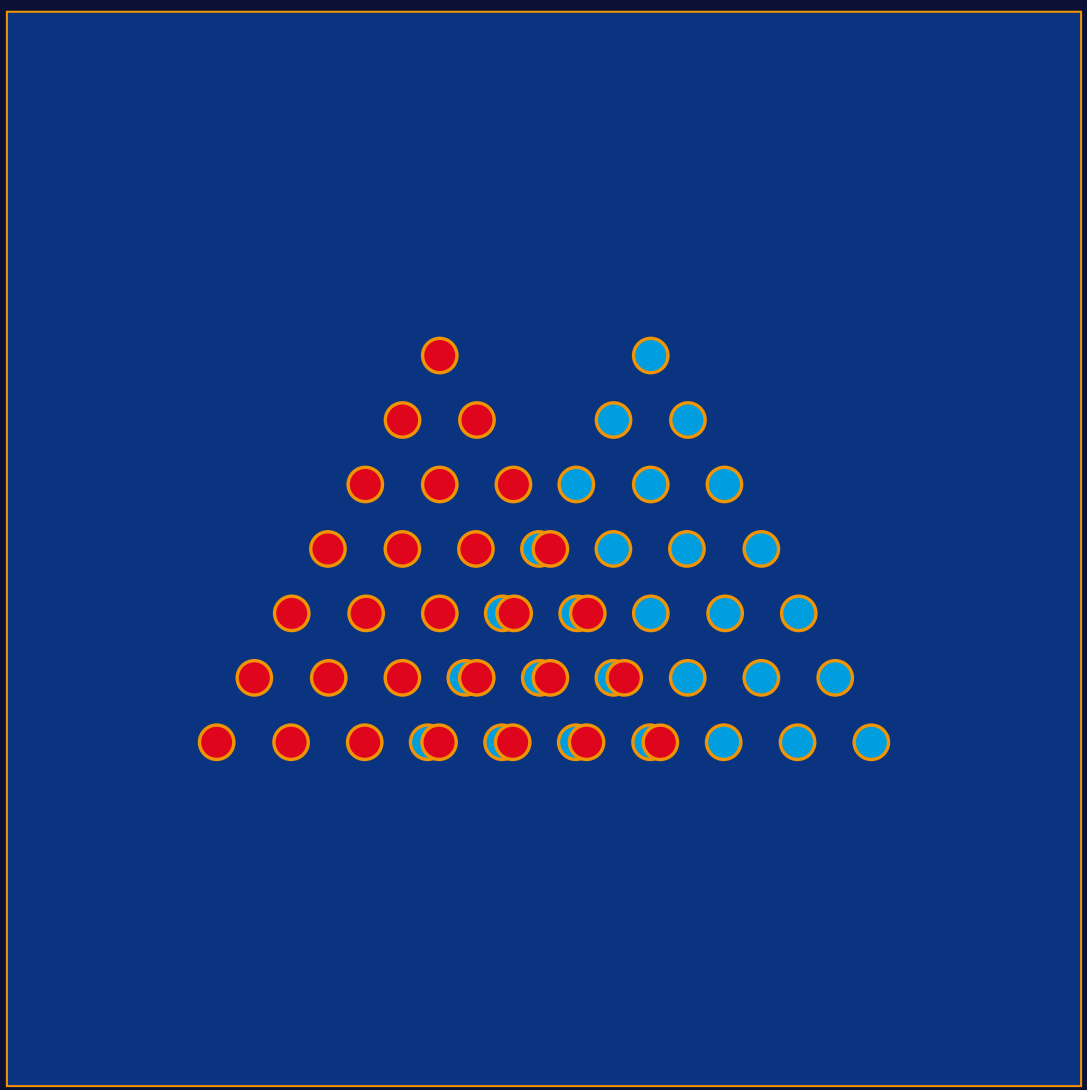


41

$1 + 2 + 3 + \ldots + n$

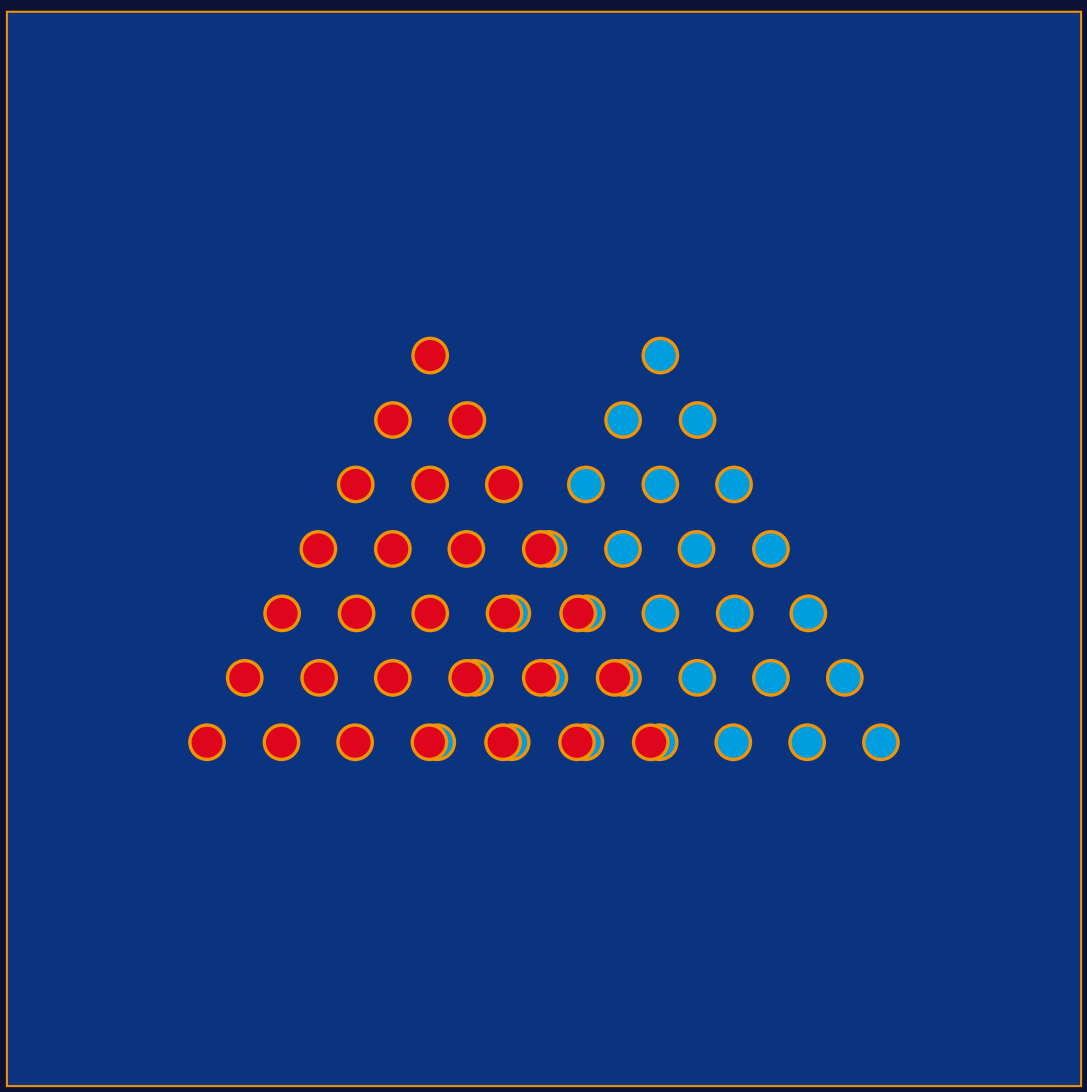


$1 + 2 + 3 + \ldots + n$



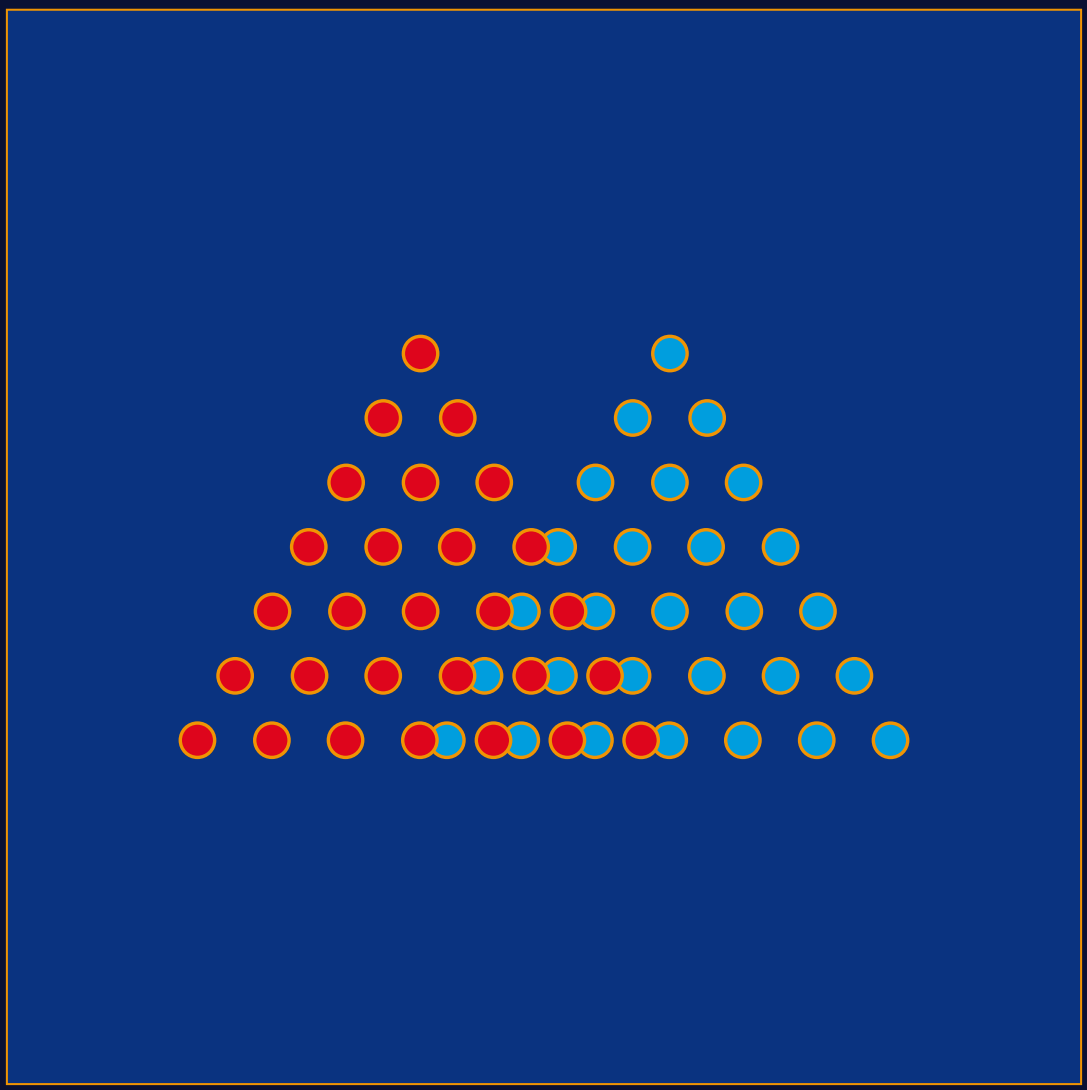
45

$1 + 2 + 3 + \ldots + n$



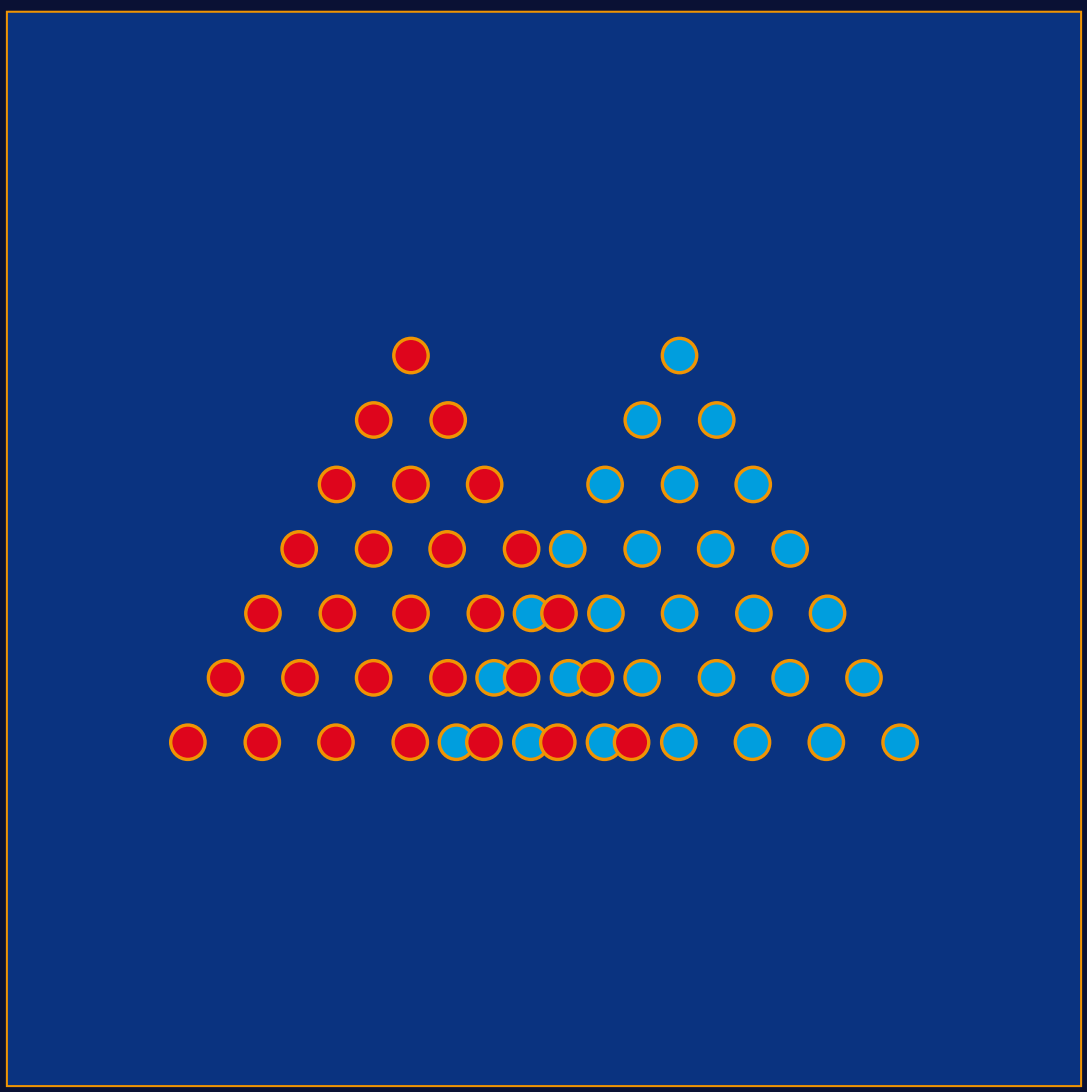
47

$1 + 2 + 3 + \ldots + n$



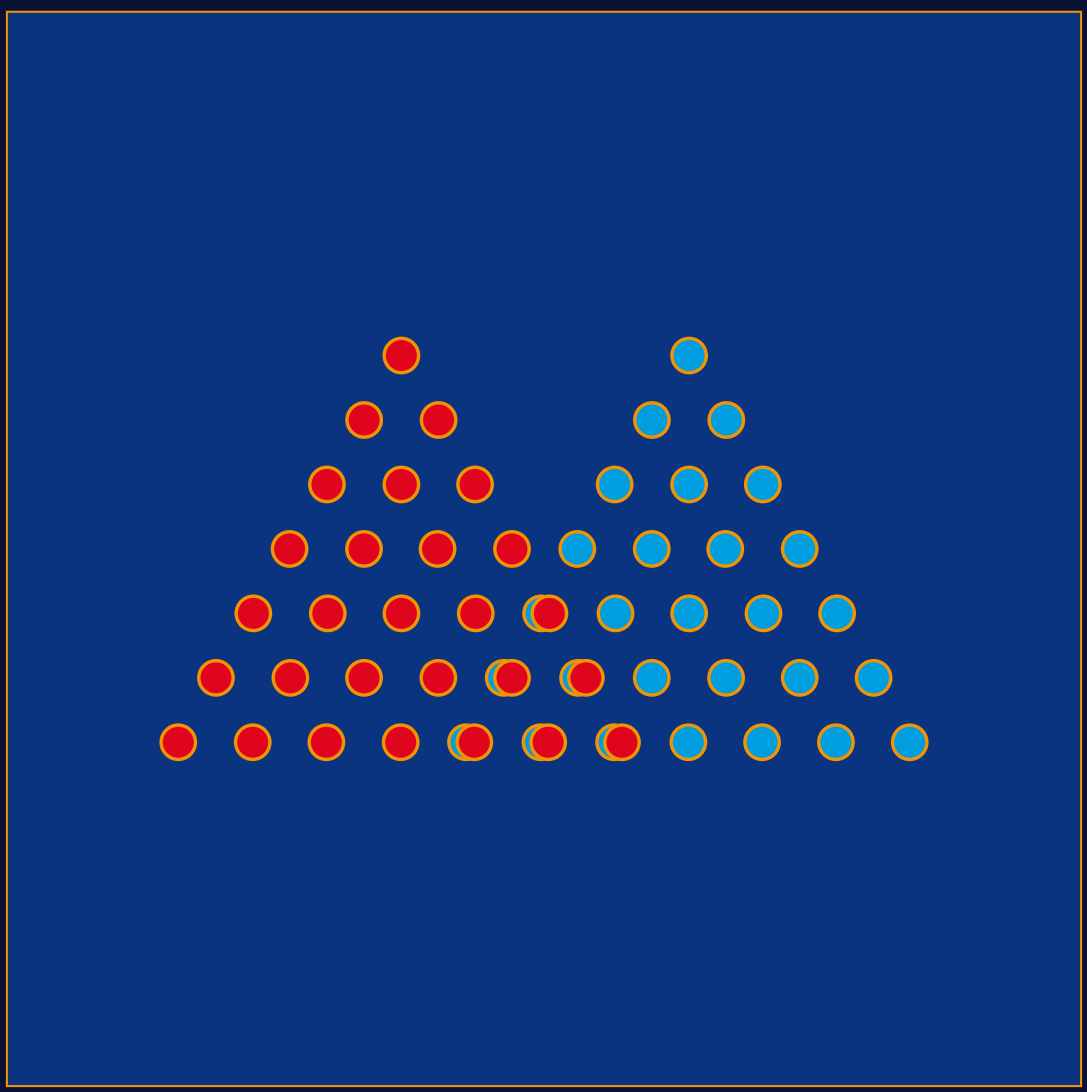
49

$1 + 2 + 3 + \ldots + n$

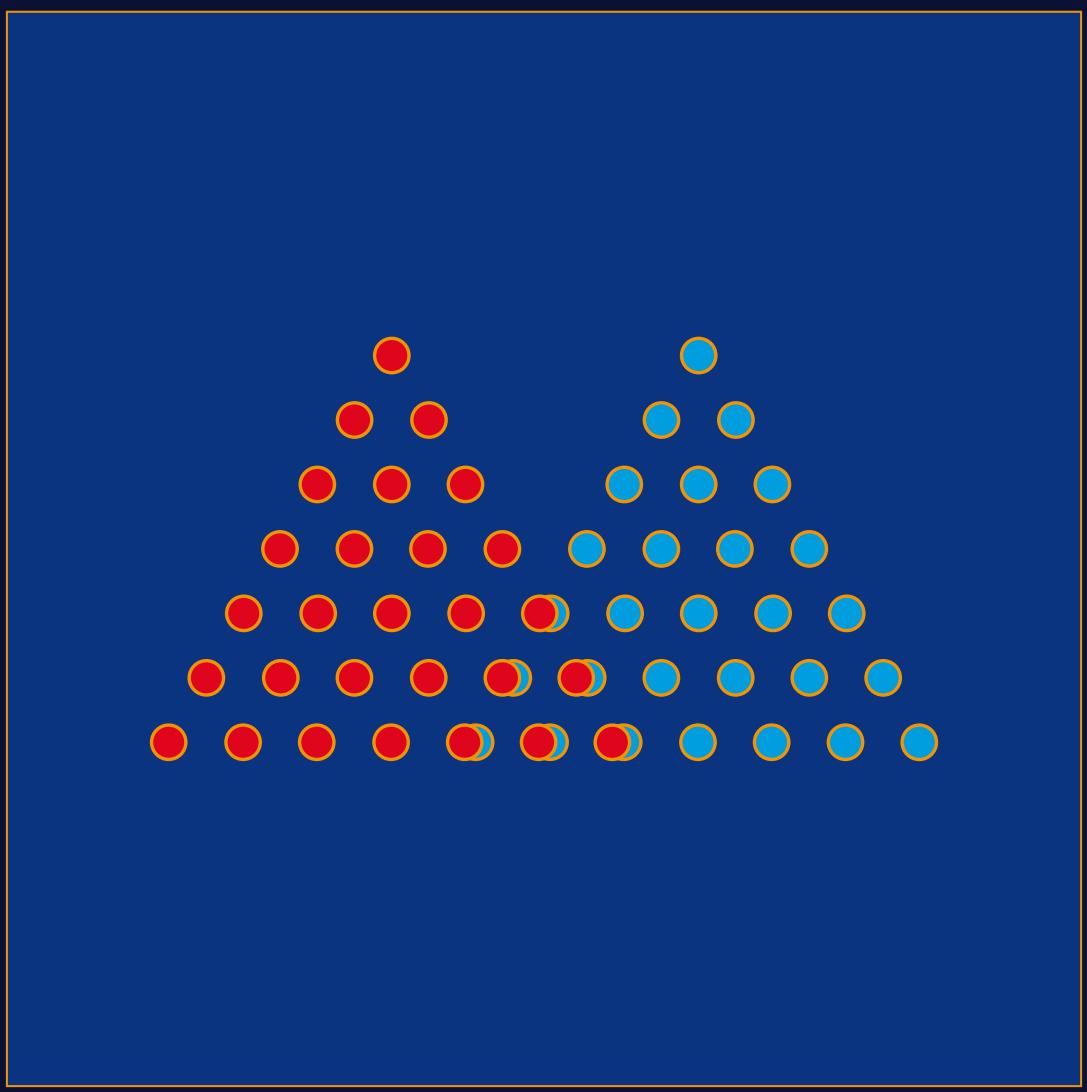


51

$1 + 2 + 3 + \ldots + n$

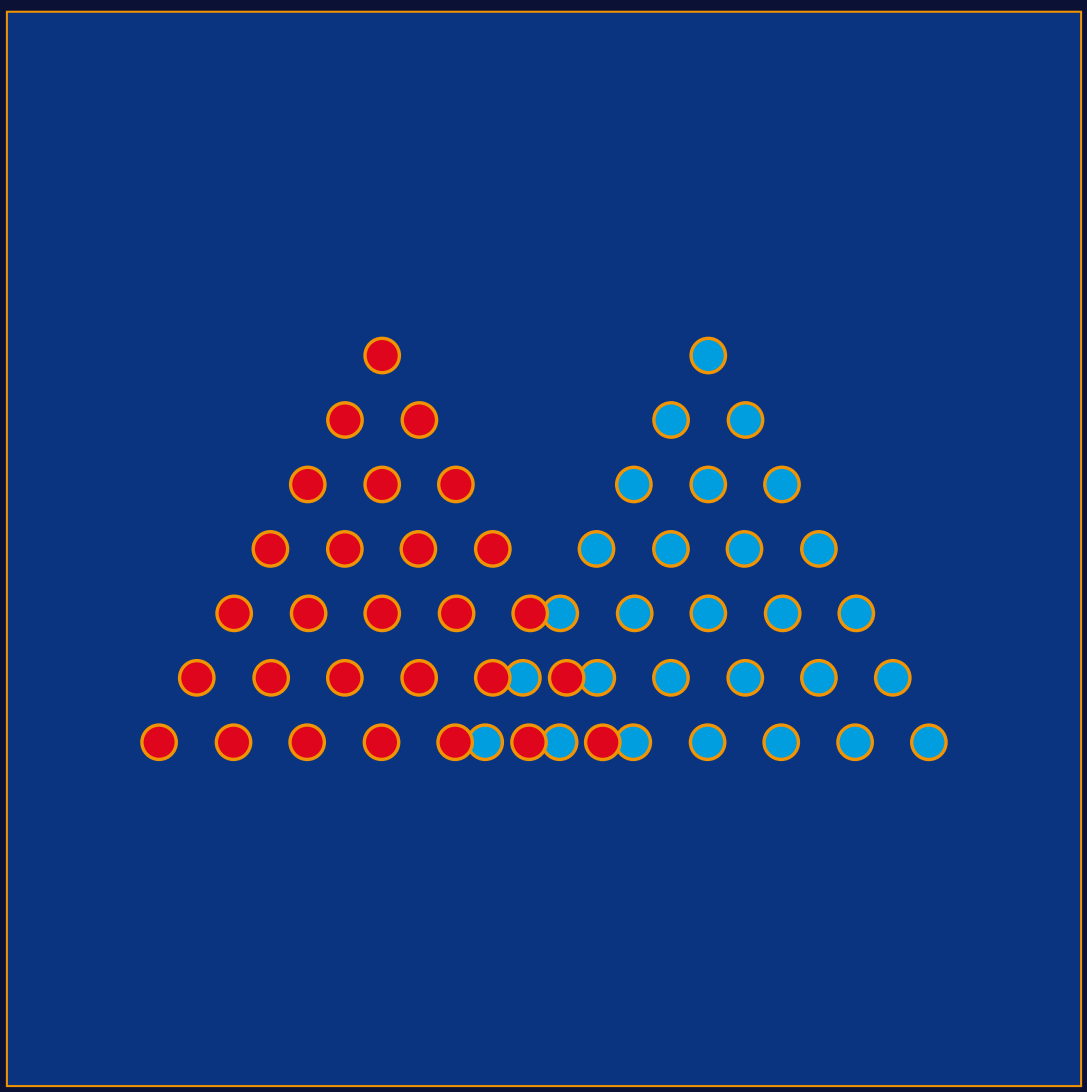


$1 + 2 + 3 + \ldots + n$



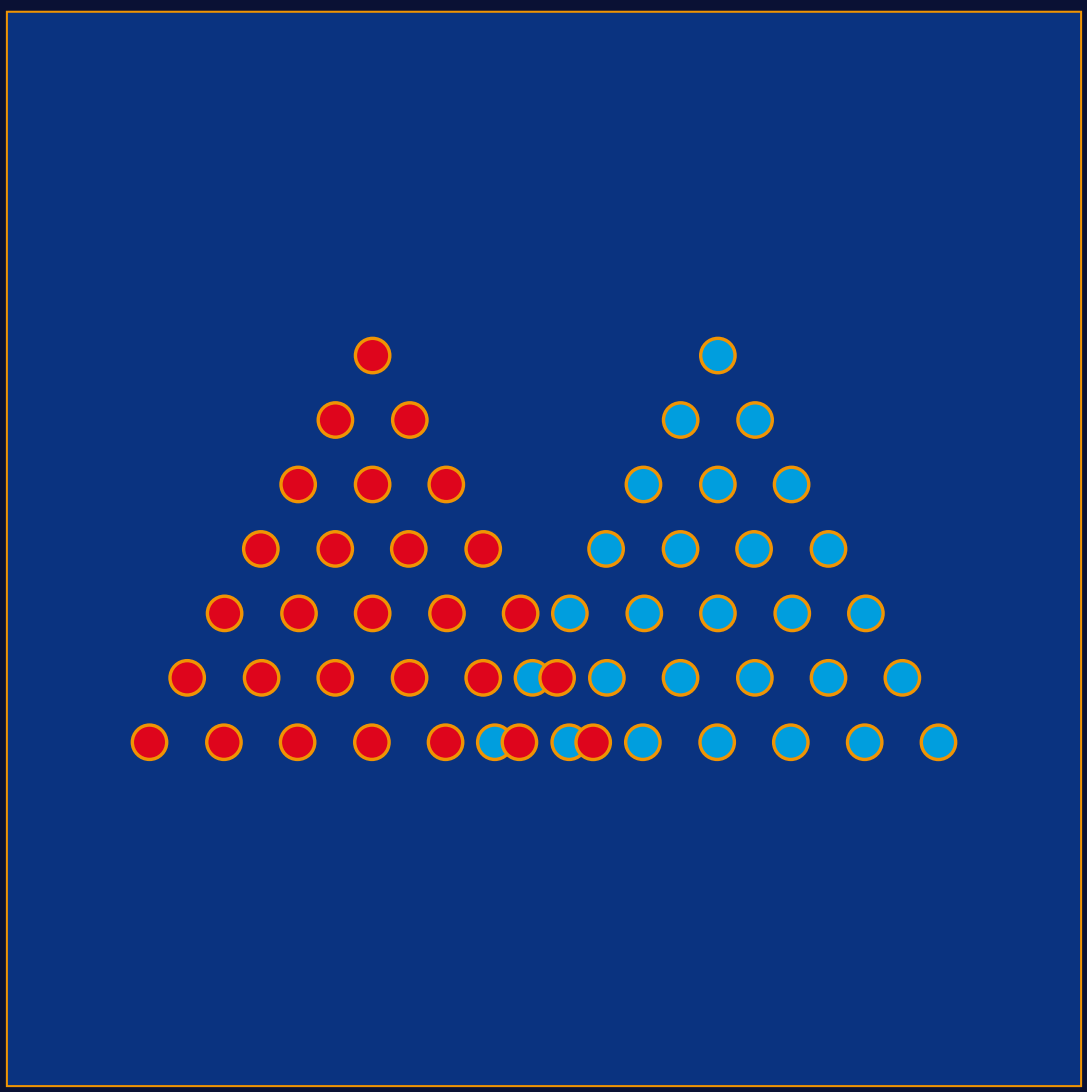
55

$1 + 2 + 3 + \ldots + n$



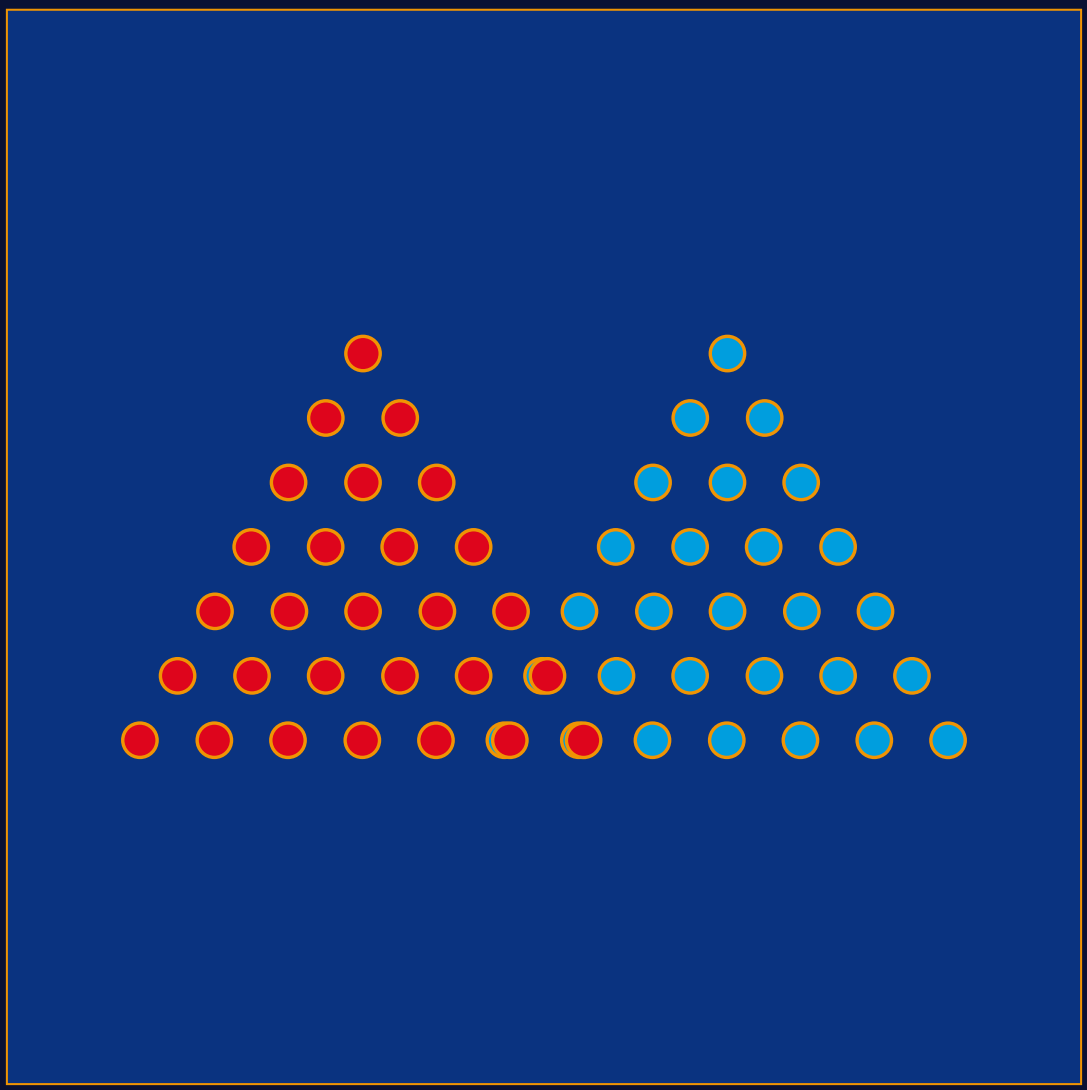
57

$1 + 2 + 3 + \ldots + n$



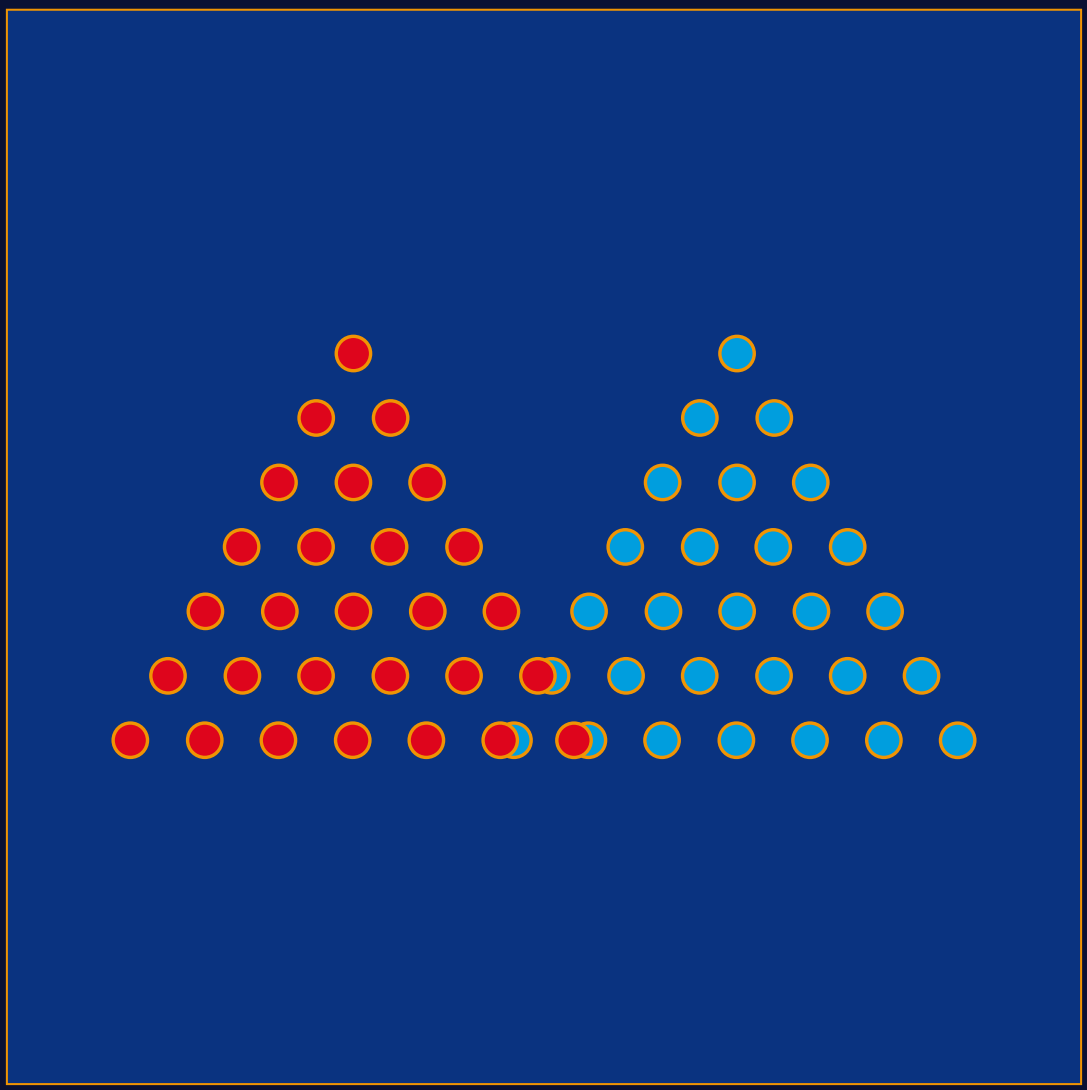
59

$1 + 2 + 3 + \ldots + n$



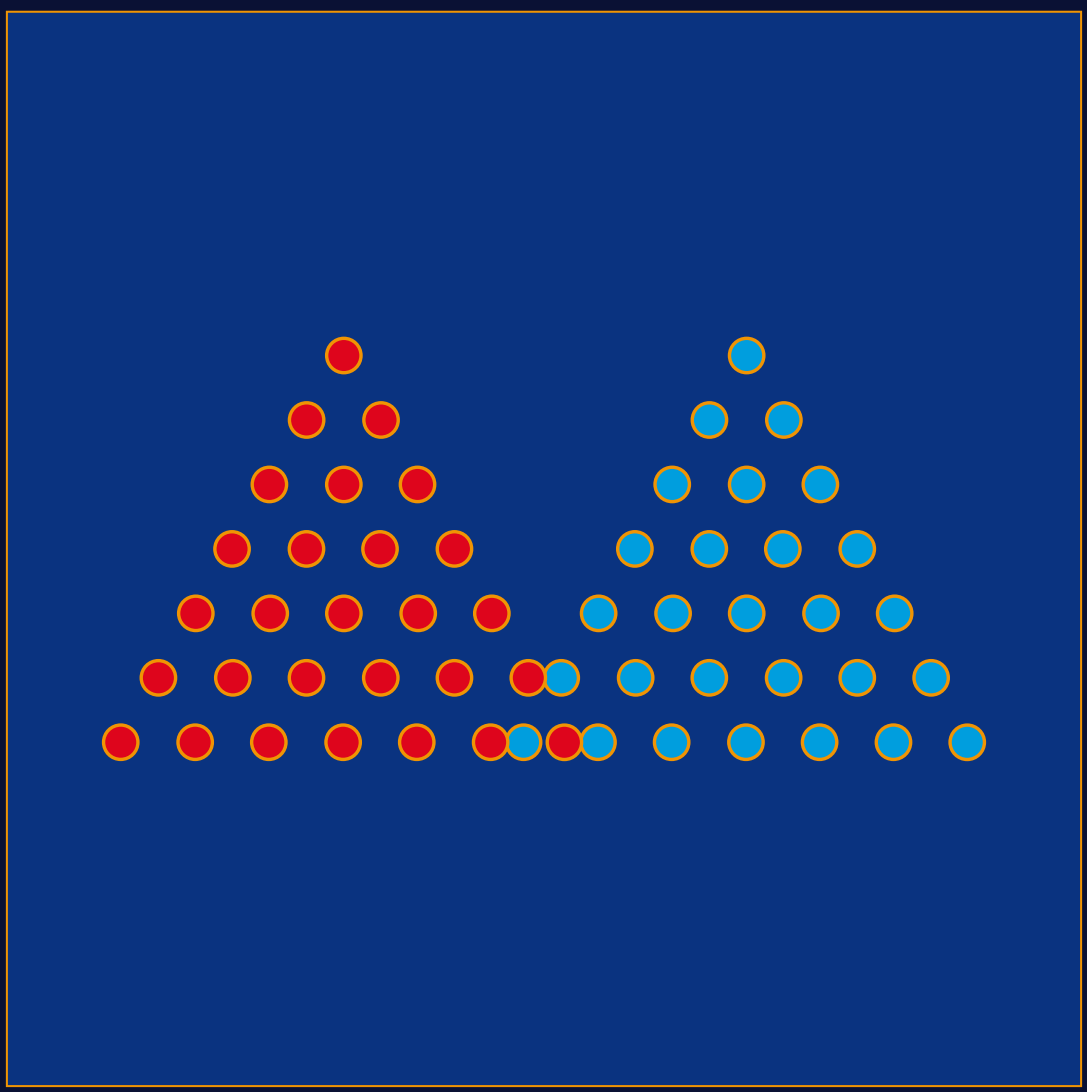
61

$1 + 2 + 3 + \ldots + n$



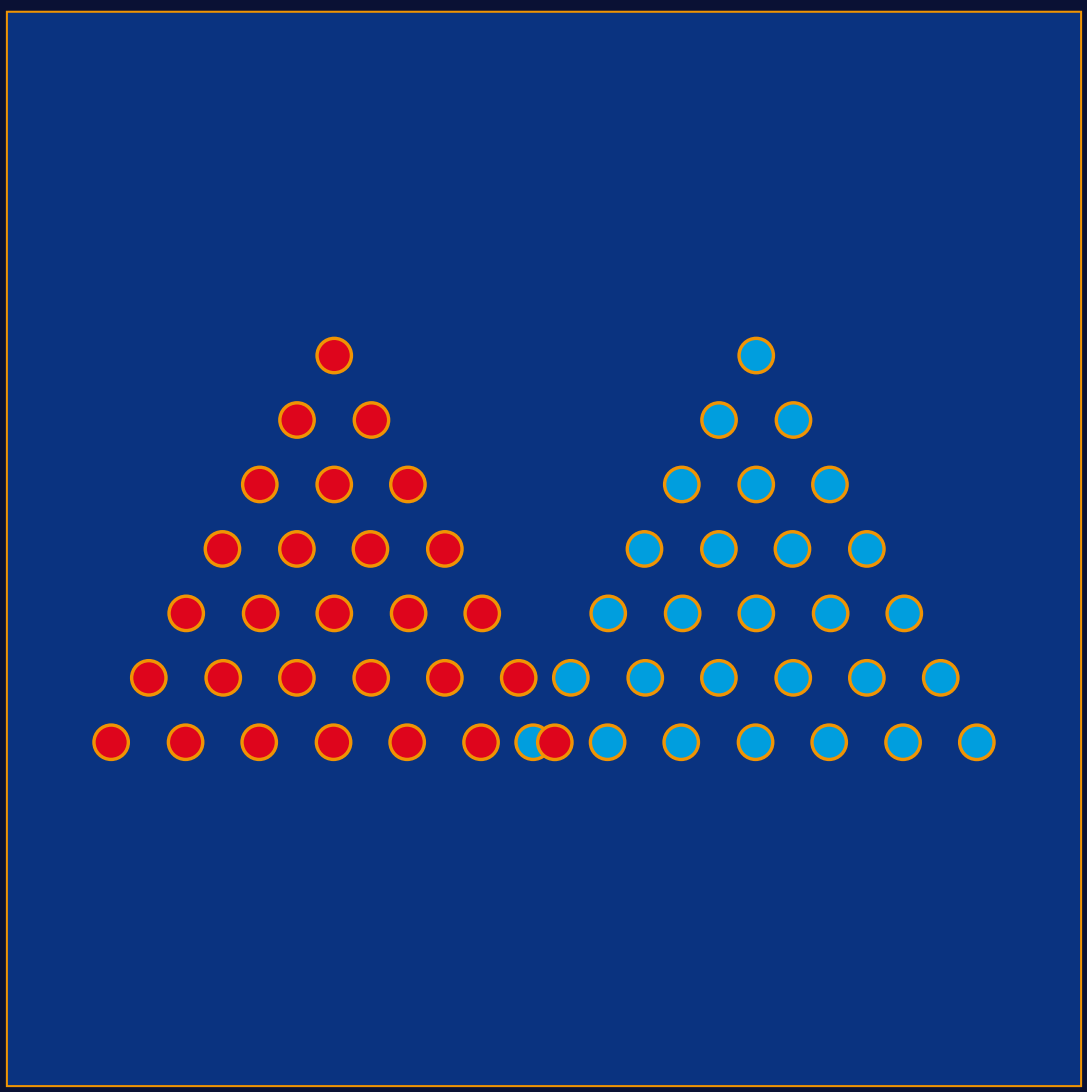
63

$1 + 2 + 3 + \ldots + n$



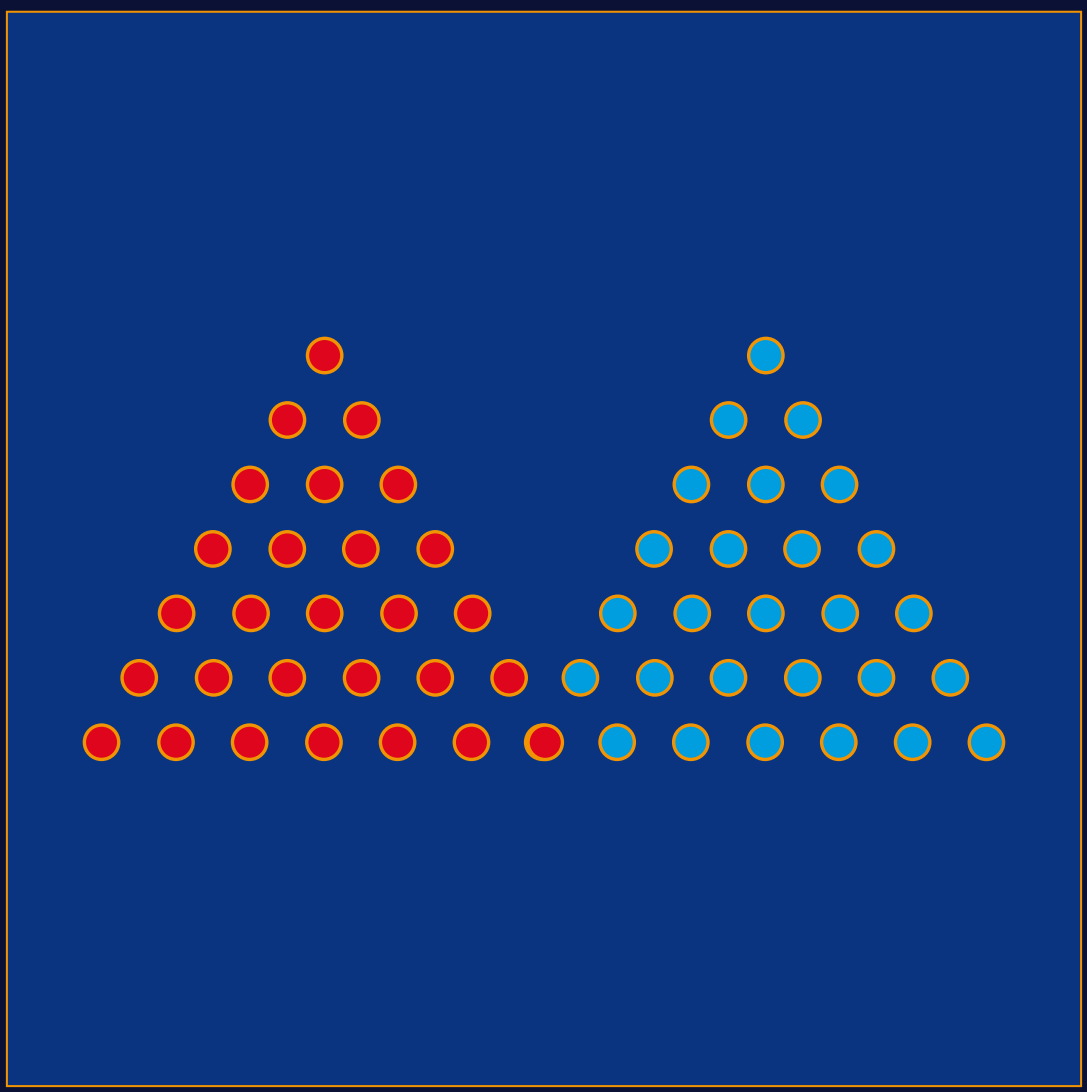
65

$1 + 2 + 3 + \ldots + n$



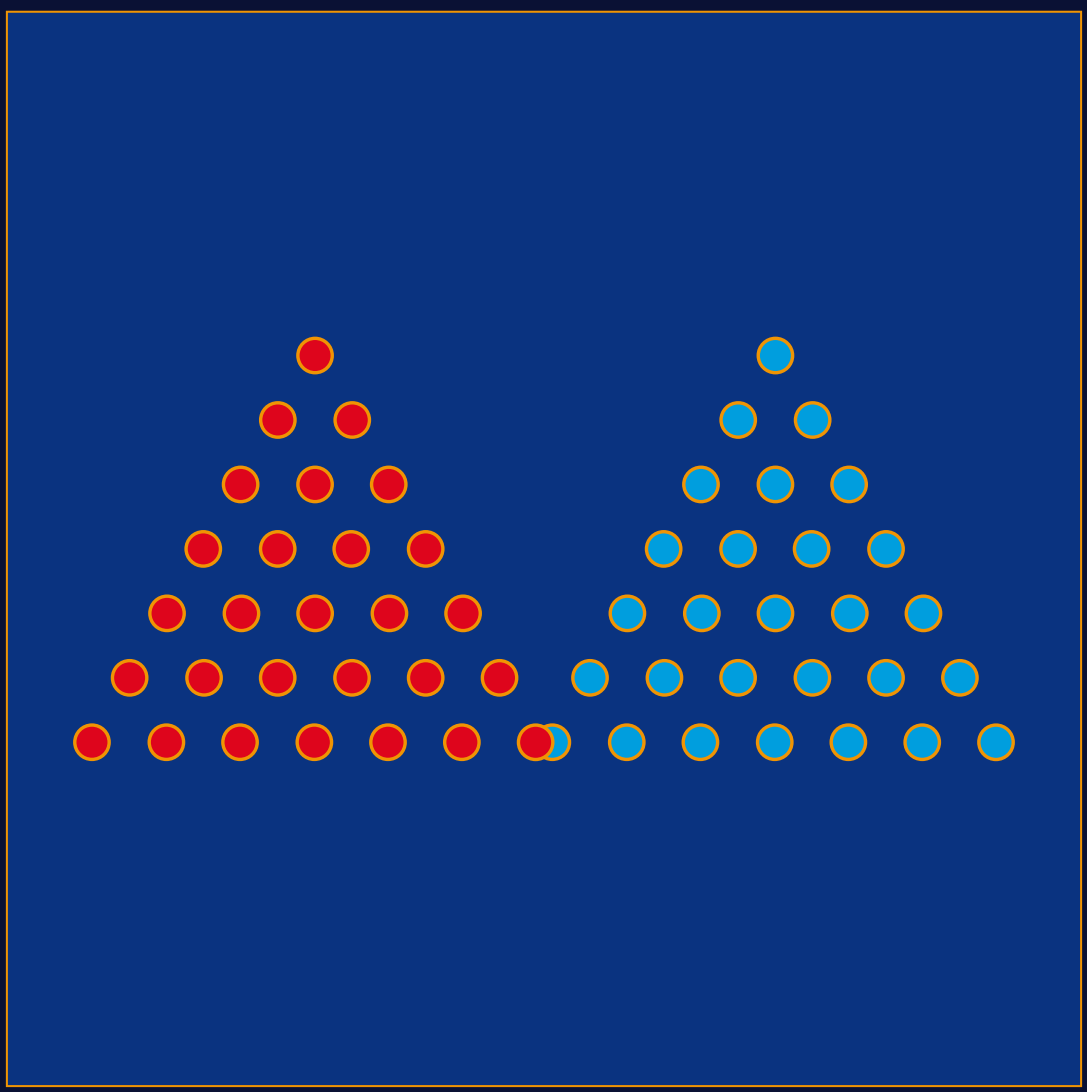
67

$1 + 2 + 3 + \ldots + n$



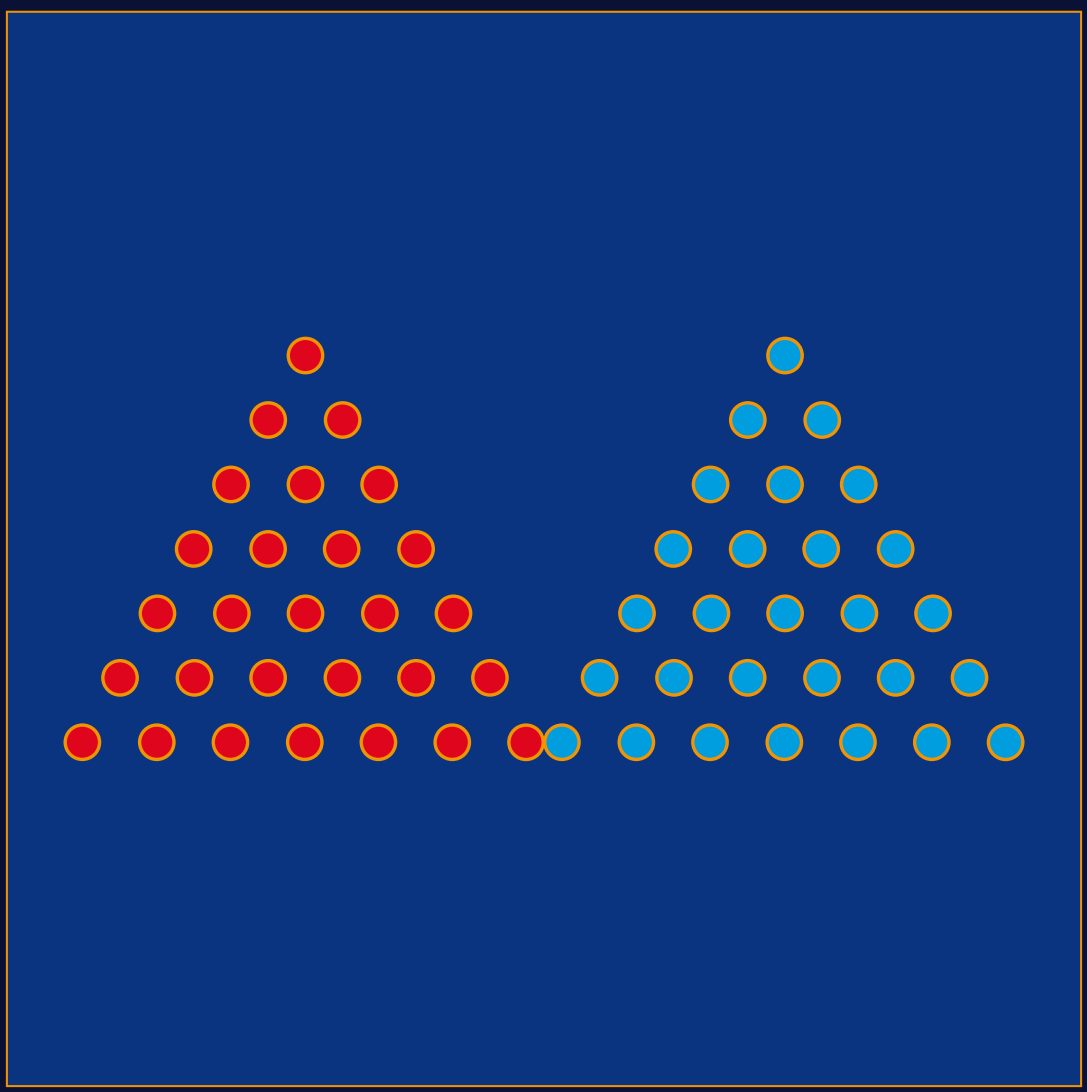
69

$1 + 2 + 3 + \ldots + n$



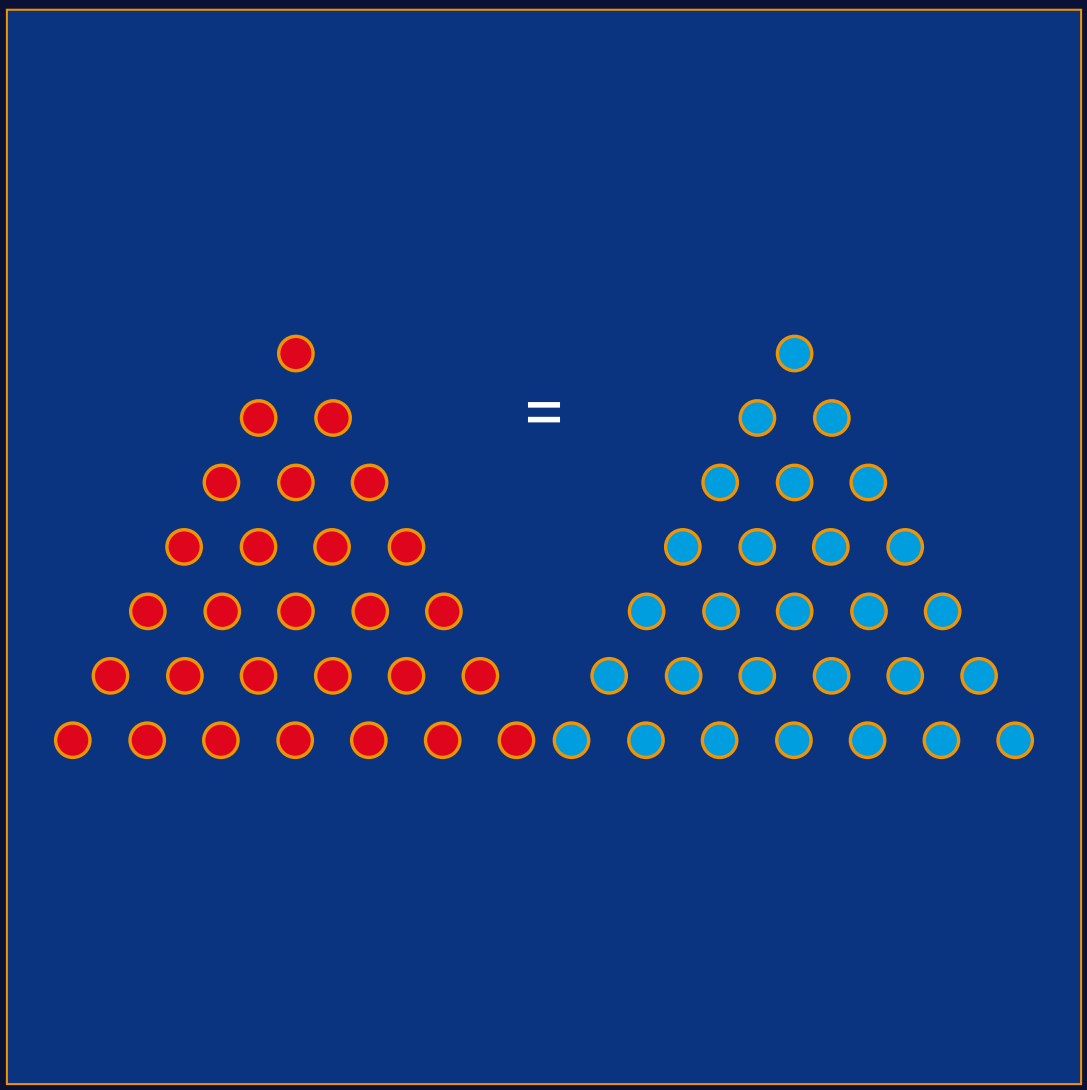
71

$1 + 2 + 3 + \ldots + n$



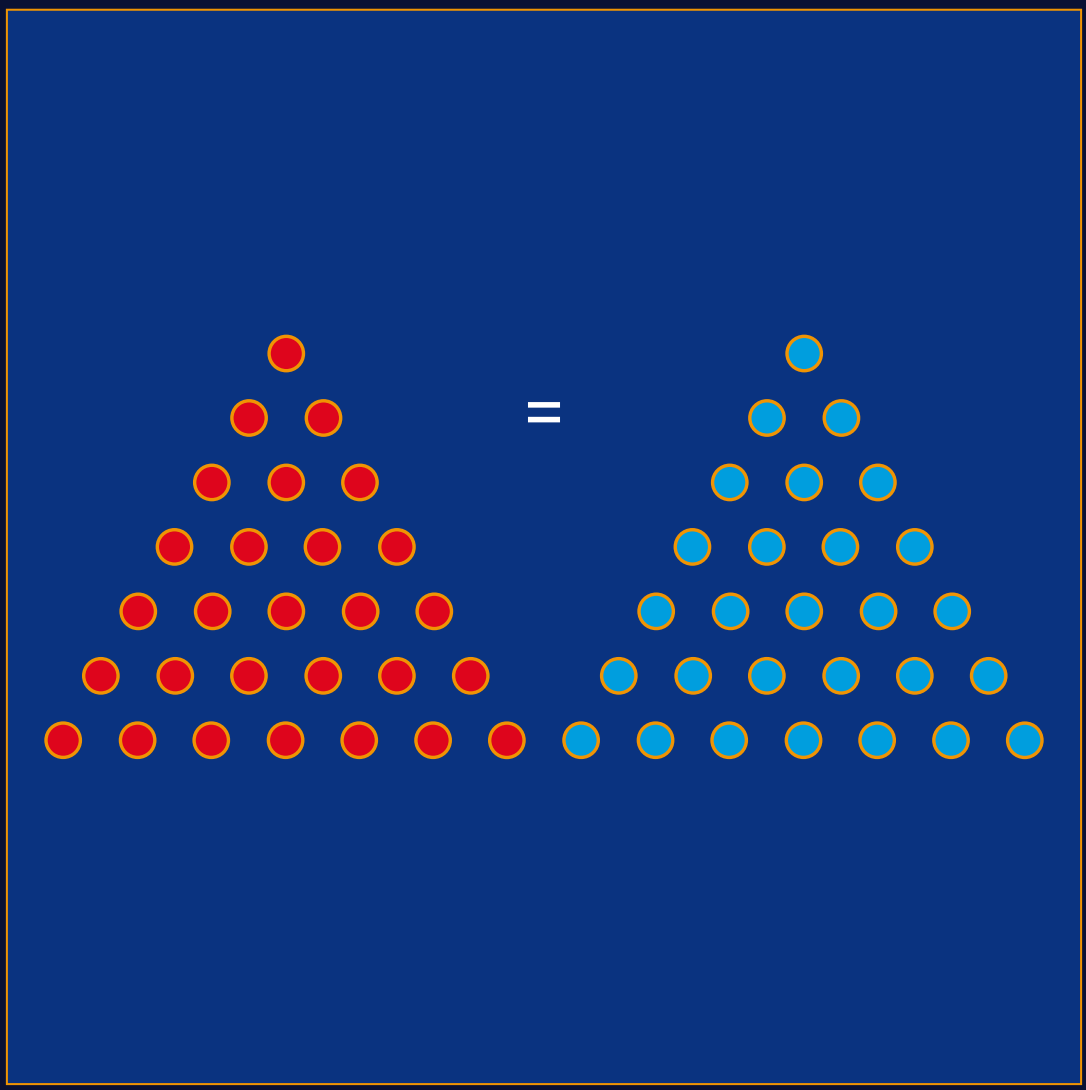
73

$1 + 2 + 3 + \ldots + n$



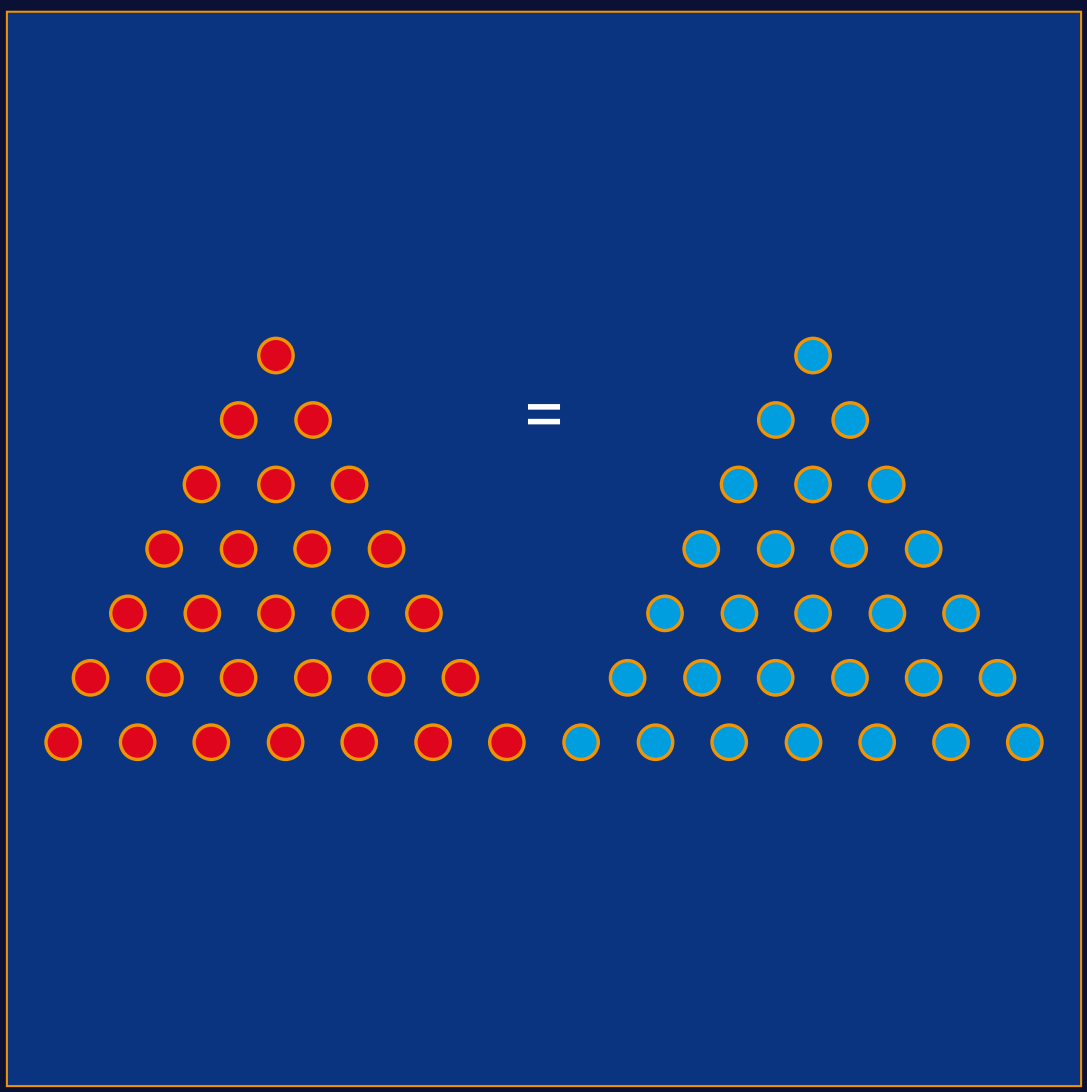
75

$1 + 2 + 3 + \ldots + n$



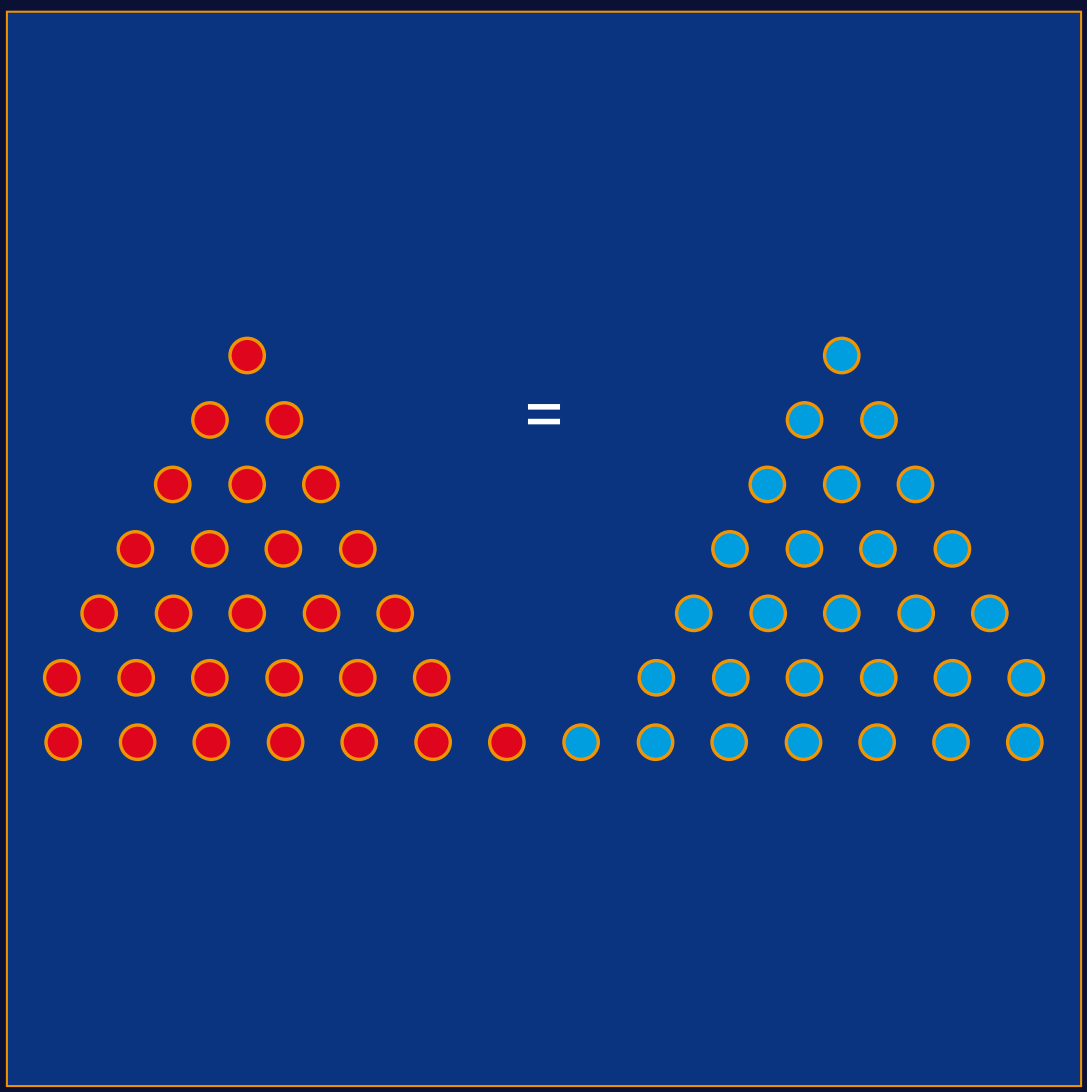
77

$1 + 2 + 3 + \ldots + n$



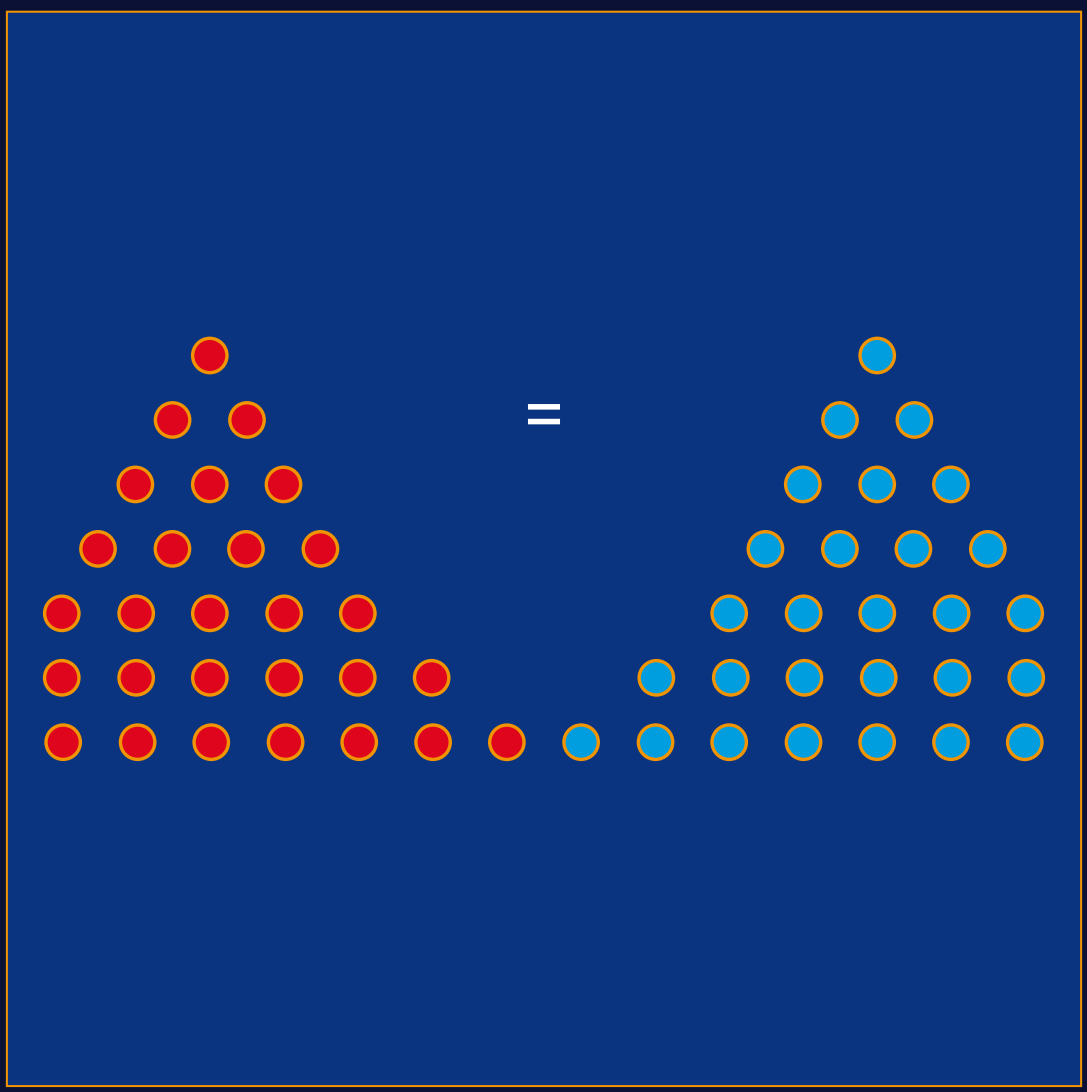
79

$1 + 2 + 3 + \ldots + n$

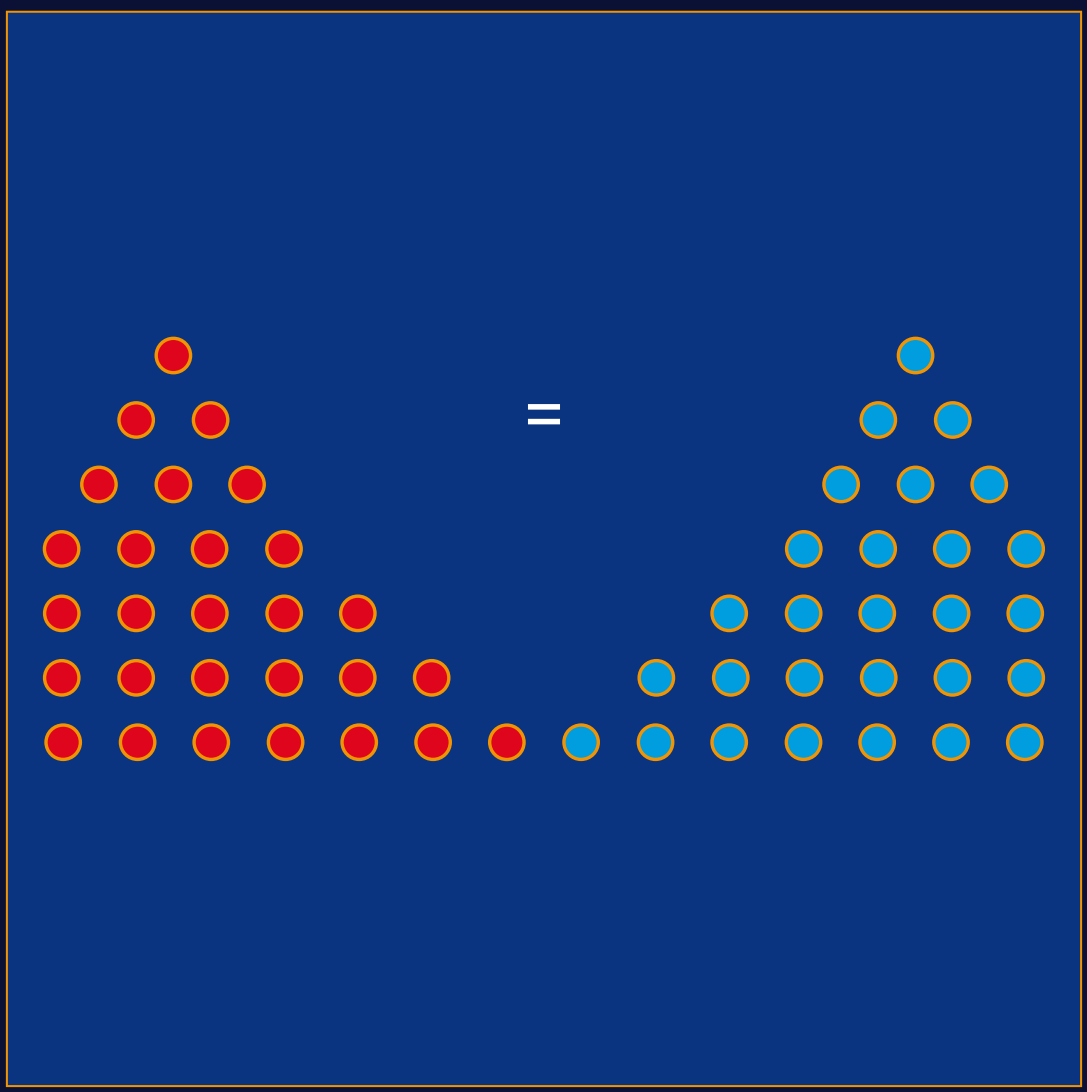


81

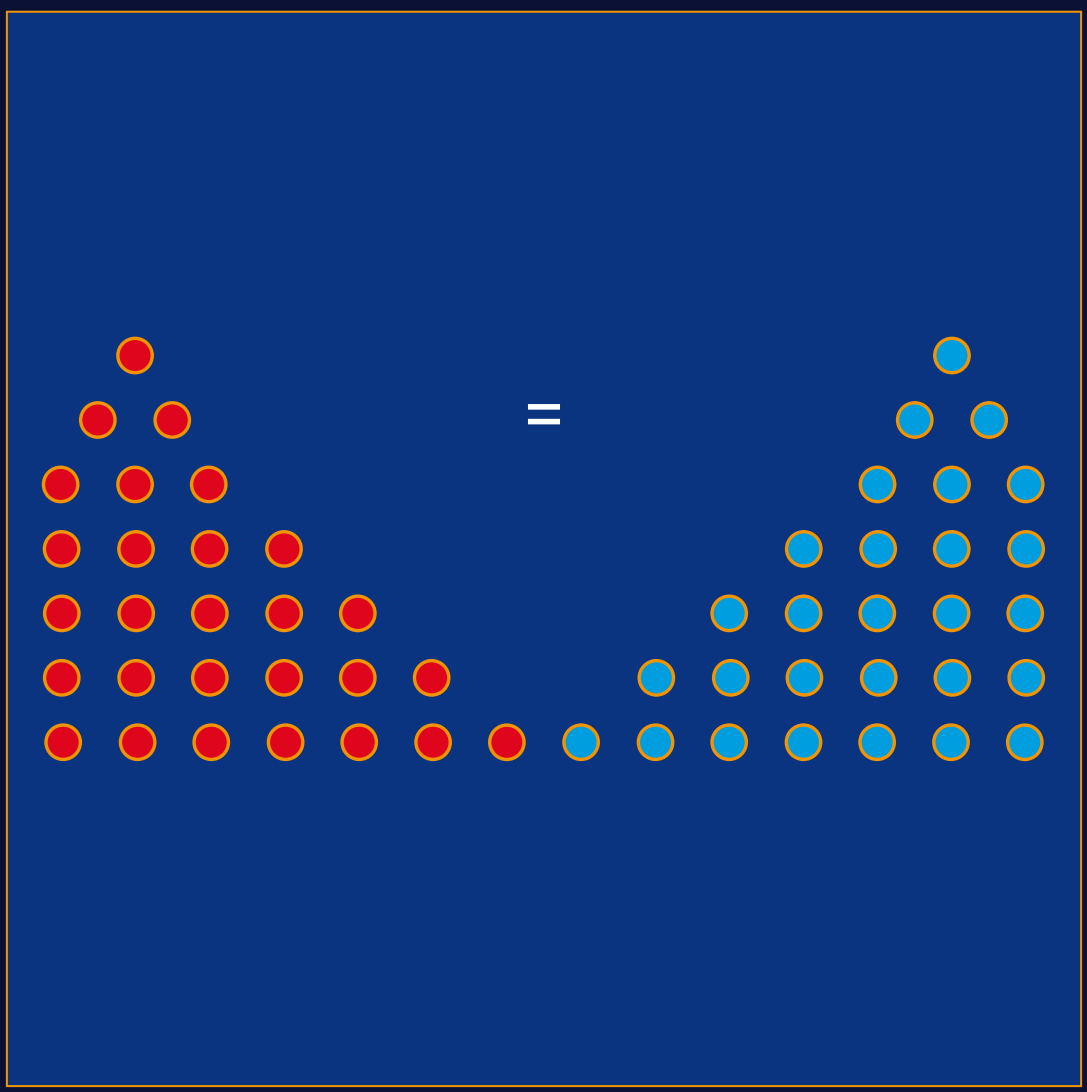
$1 + 2 + 3 + \ldots + n$



$1 + 2 + 3 + \ldots + n$

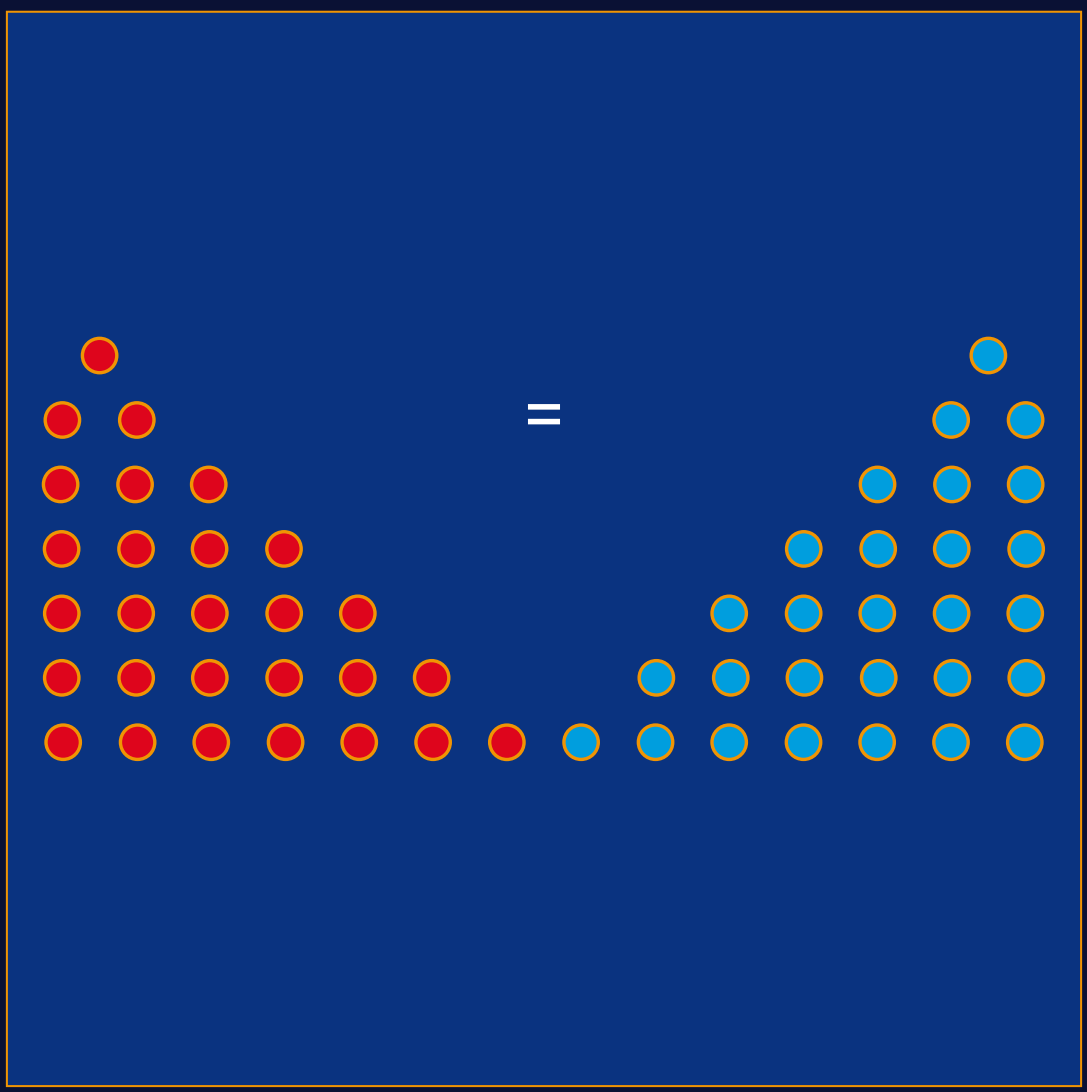


$1 + 2 + 3 + \ldots + n$



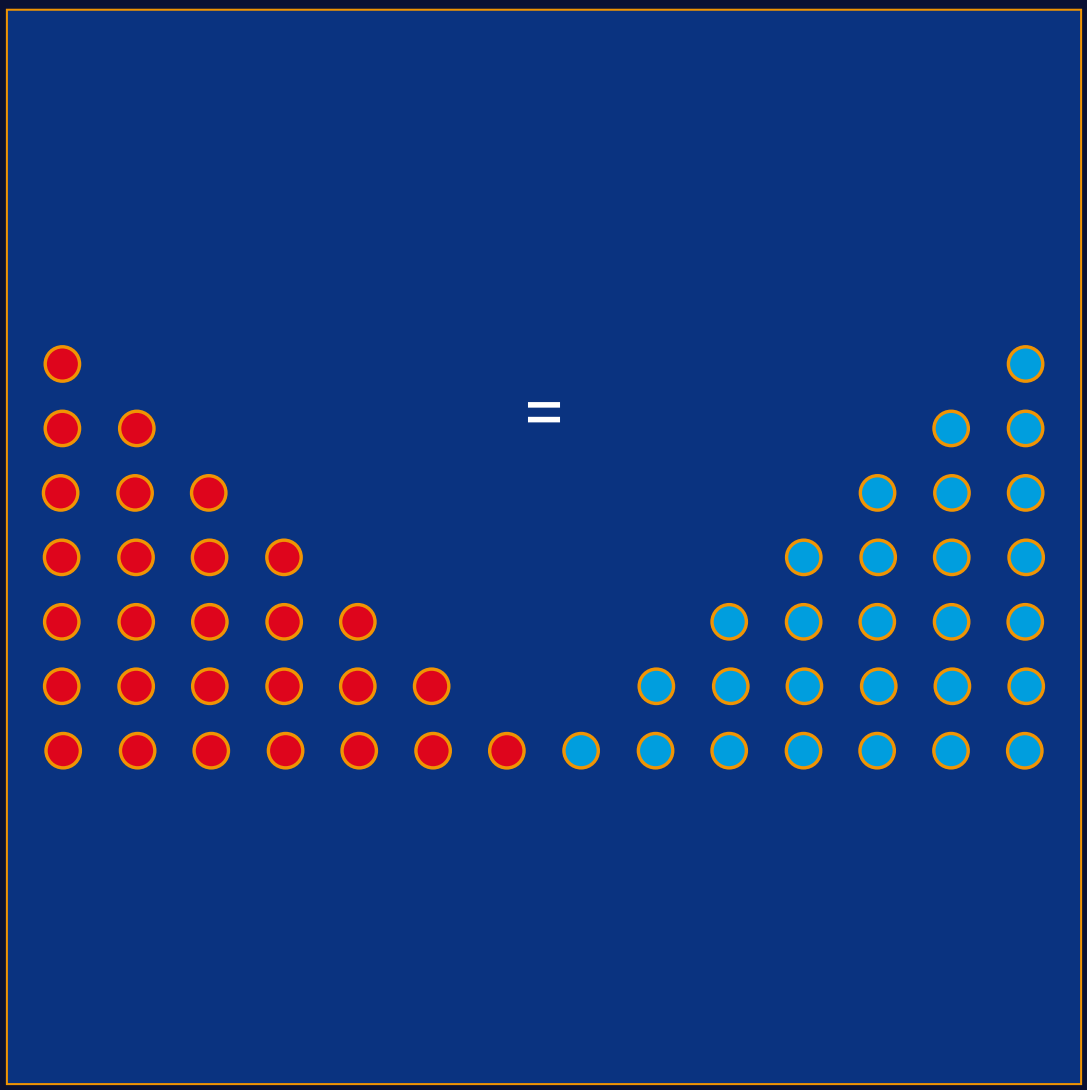
87

$1 + 2 + 3 + \ldots + n$



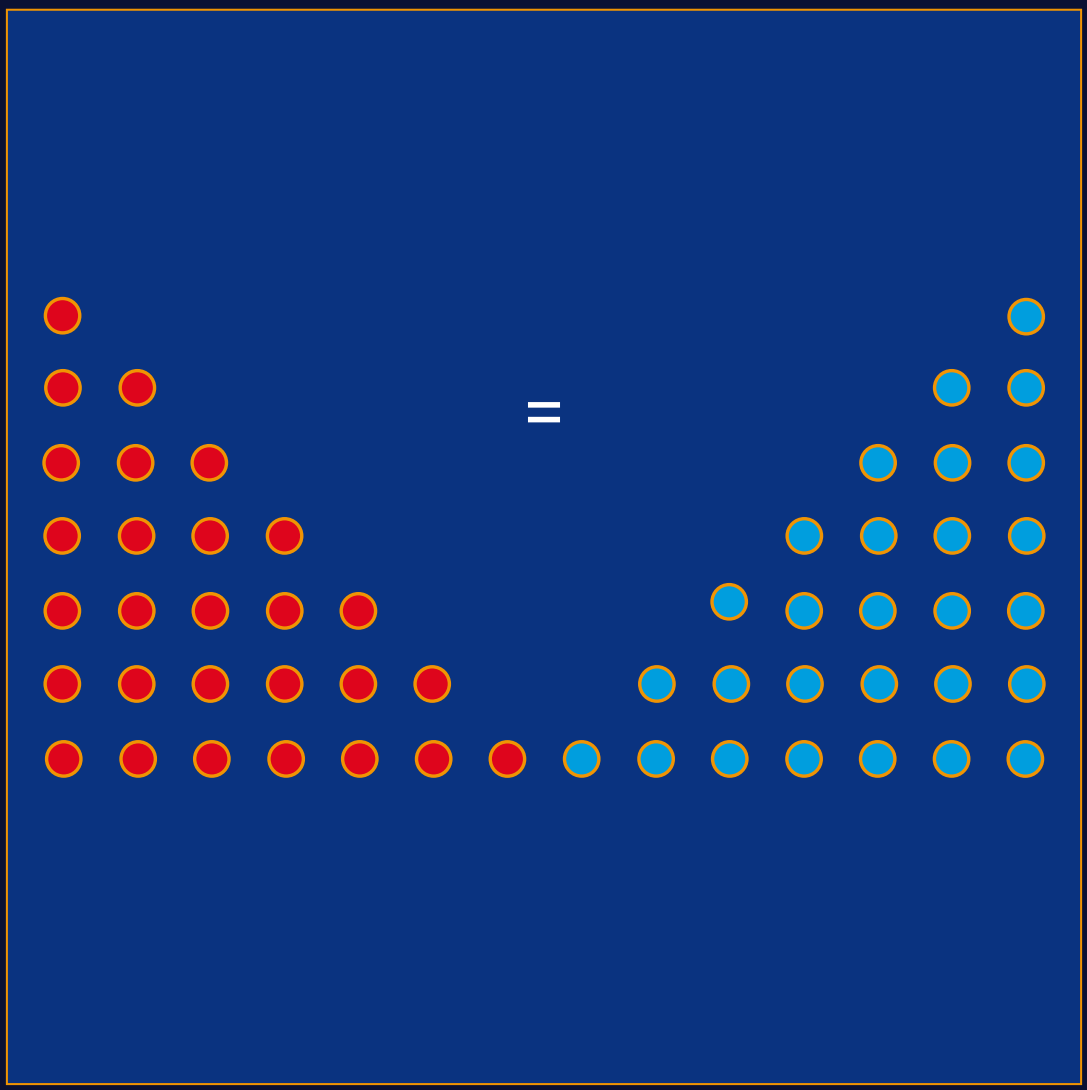
89

$1 + 2 + 3 + \ldots + n$

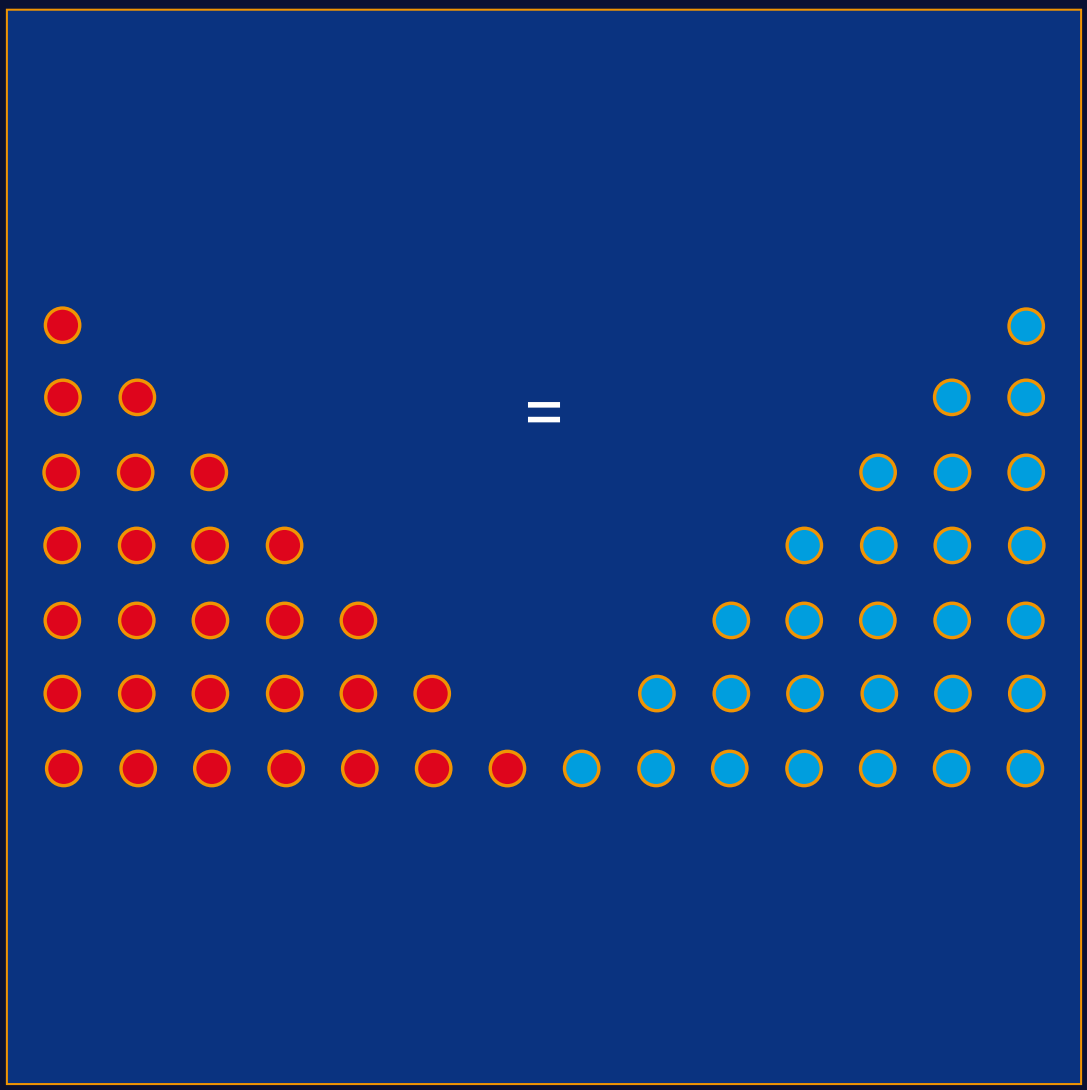


91

$1 + 2 + 3 + \ldots + n$

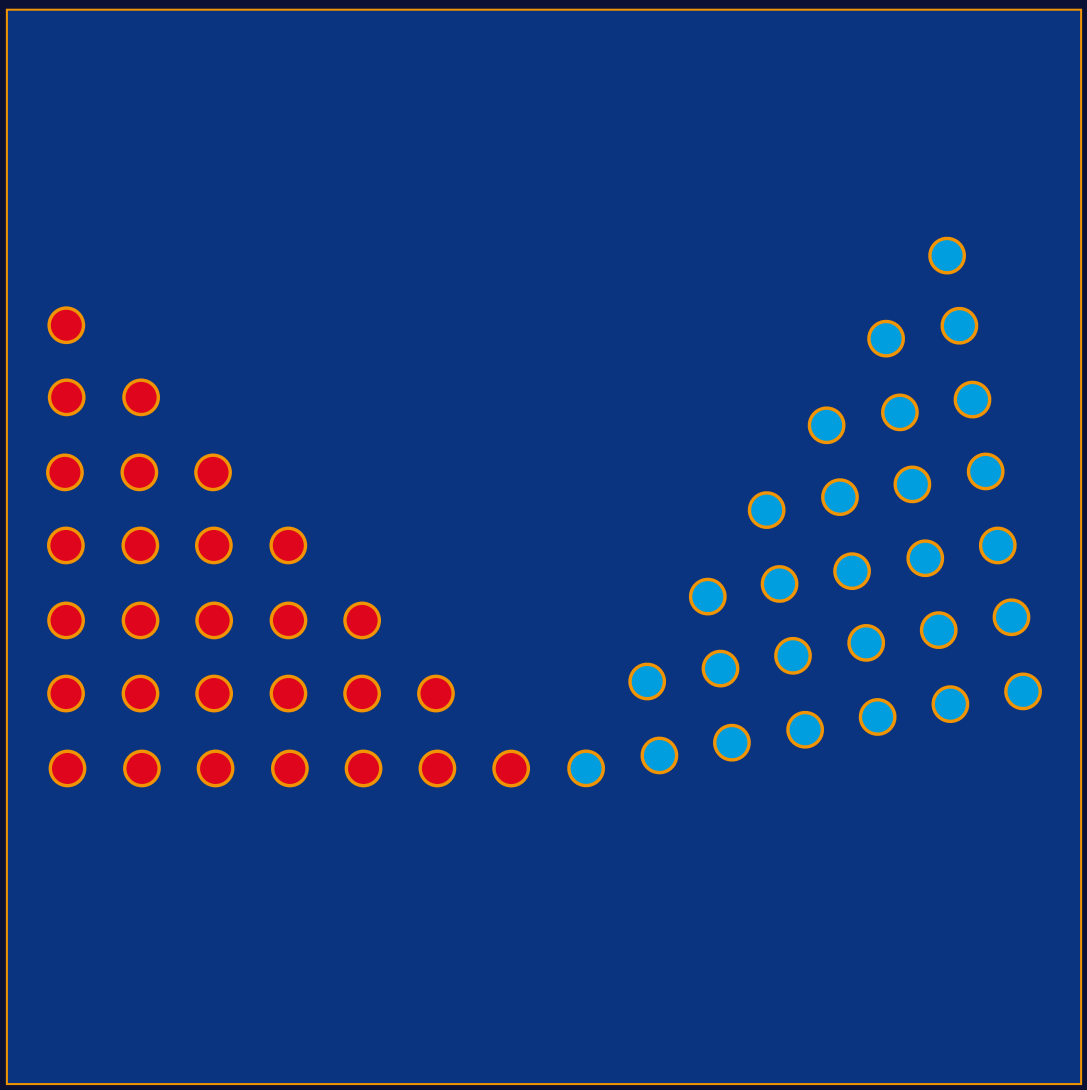


$1 + 2 + 3 + \ldots + n$



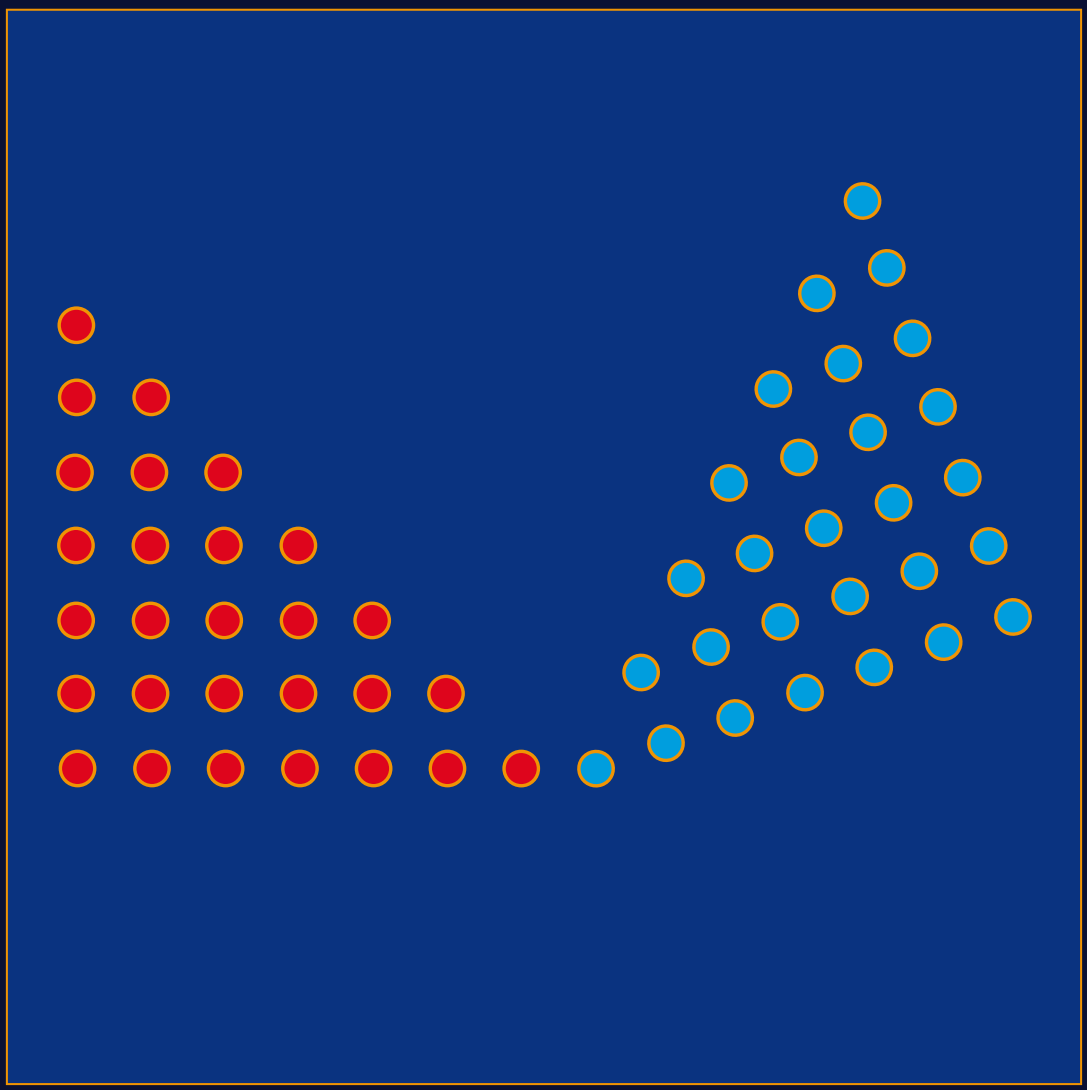
95

$1 + 2 + 3 + \ldots + n$



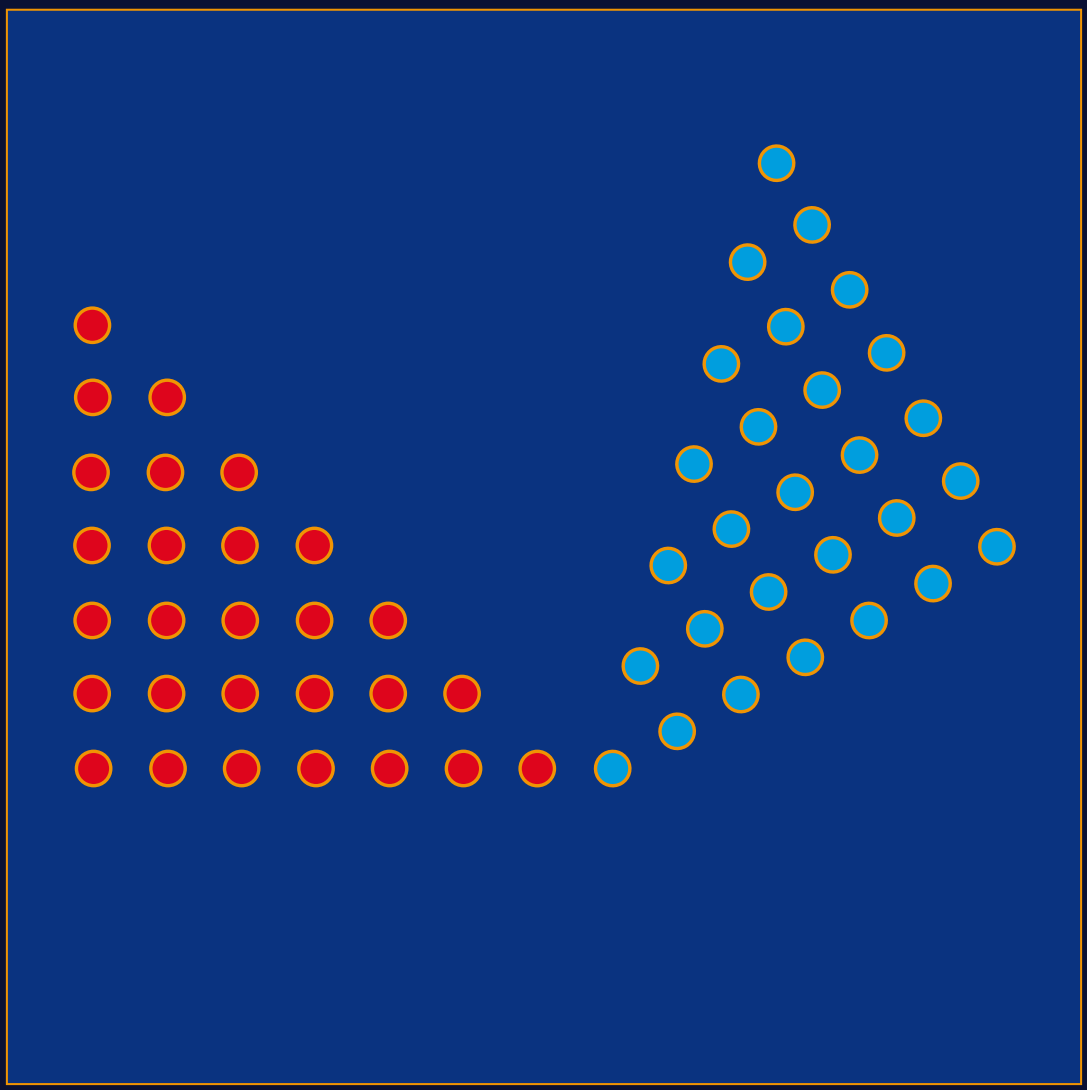
97

$1 + 2 + 3 + \ldots + n$



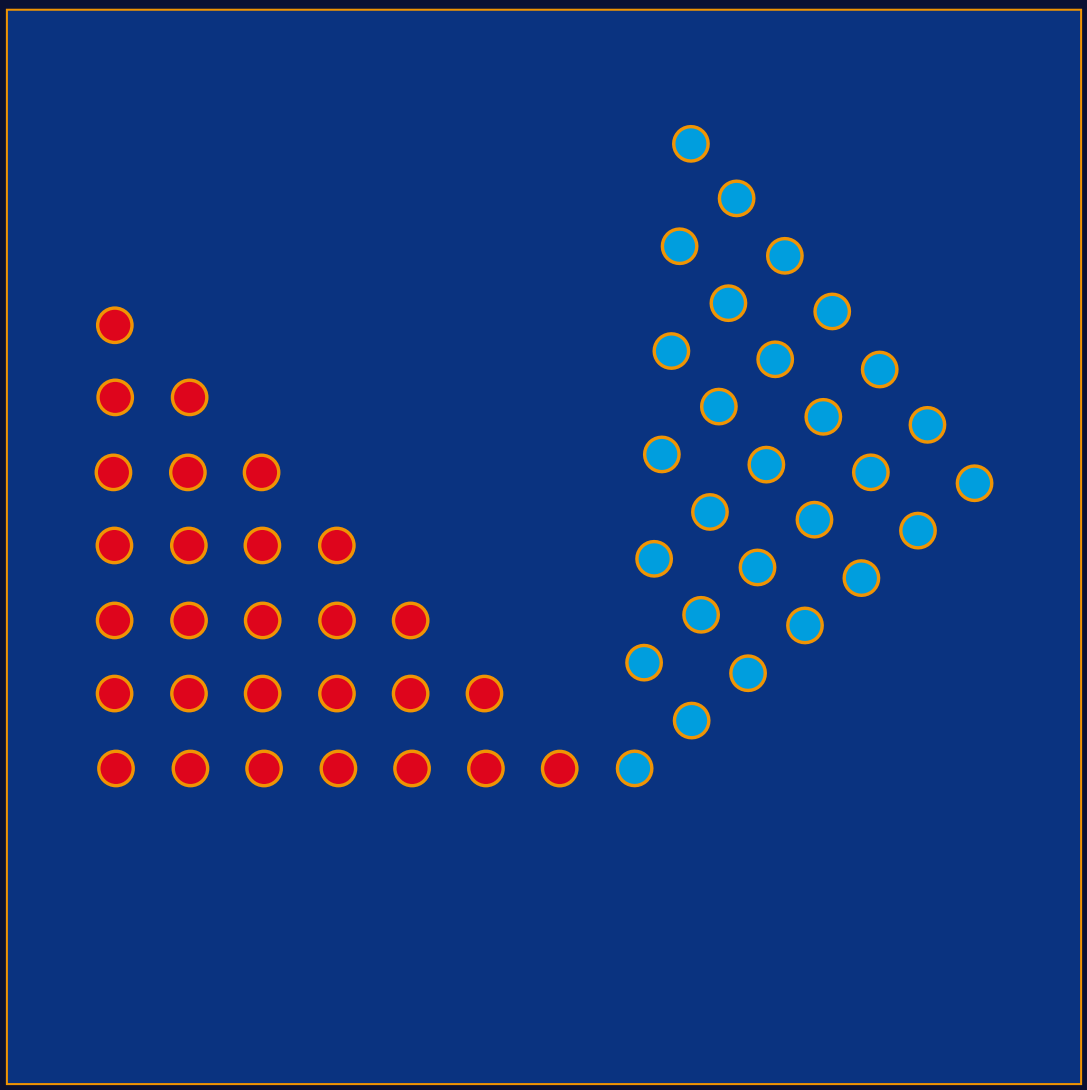
99

$1 + 2 + 3 + \ldots + n$



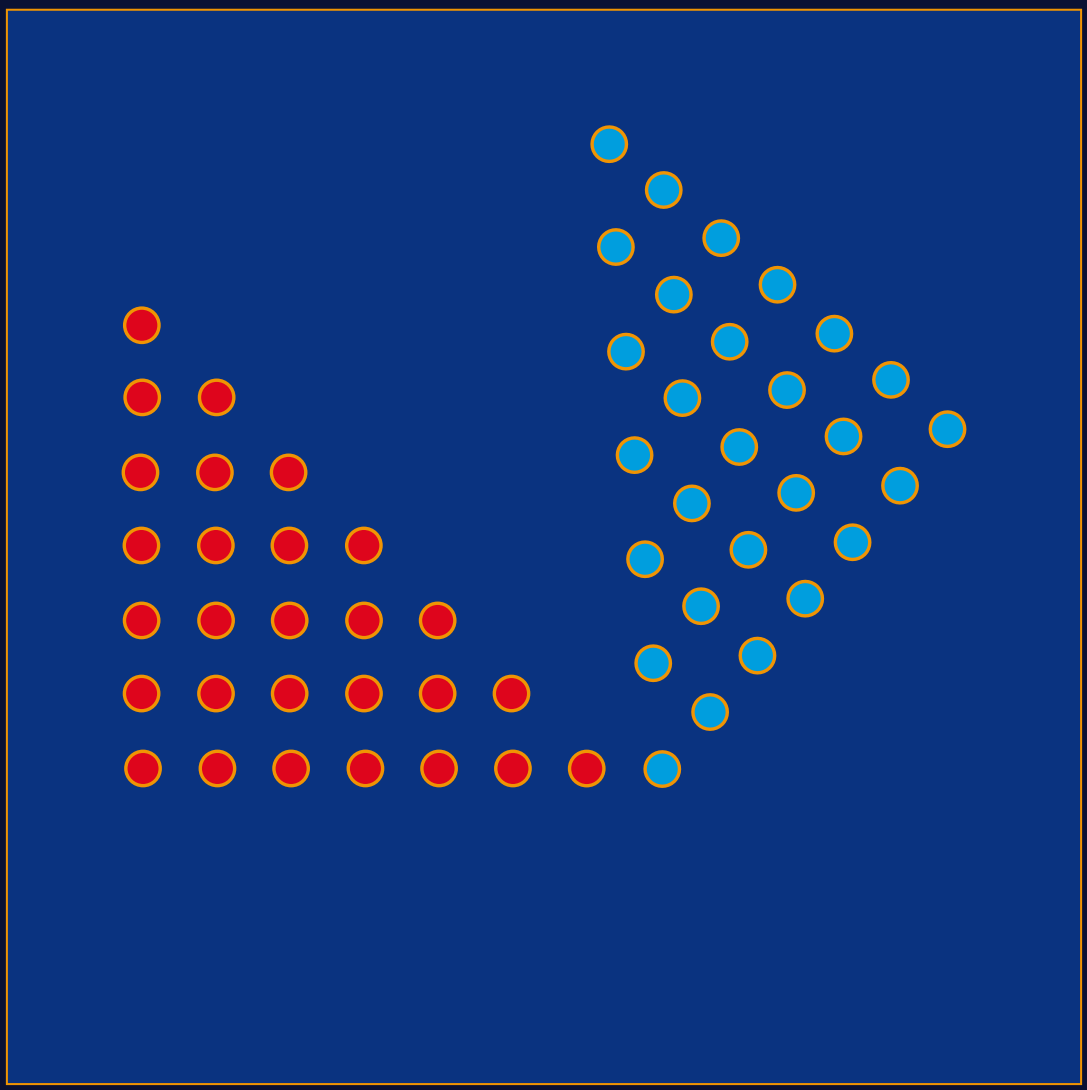
101

$1 + 2 + 3 + \ldots + n$



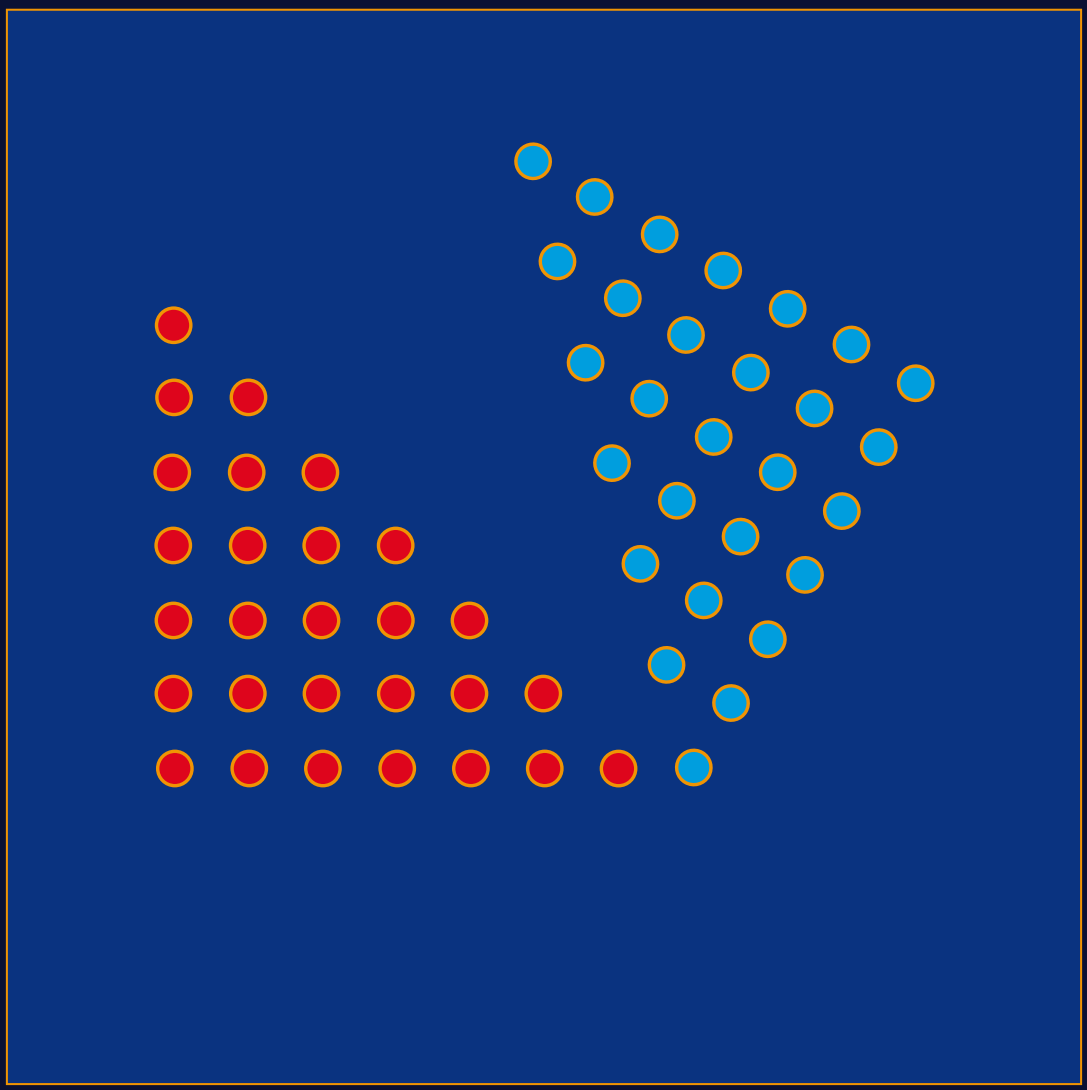
103

$1 + 2 + 3 + \ldots + n$



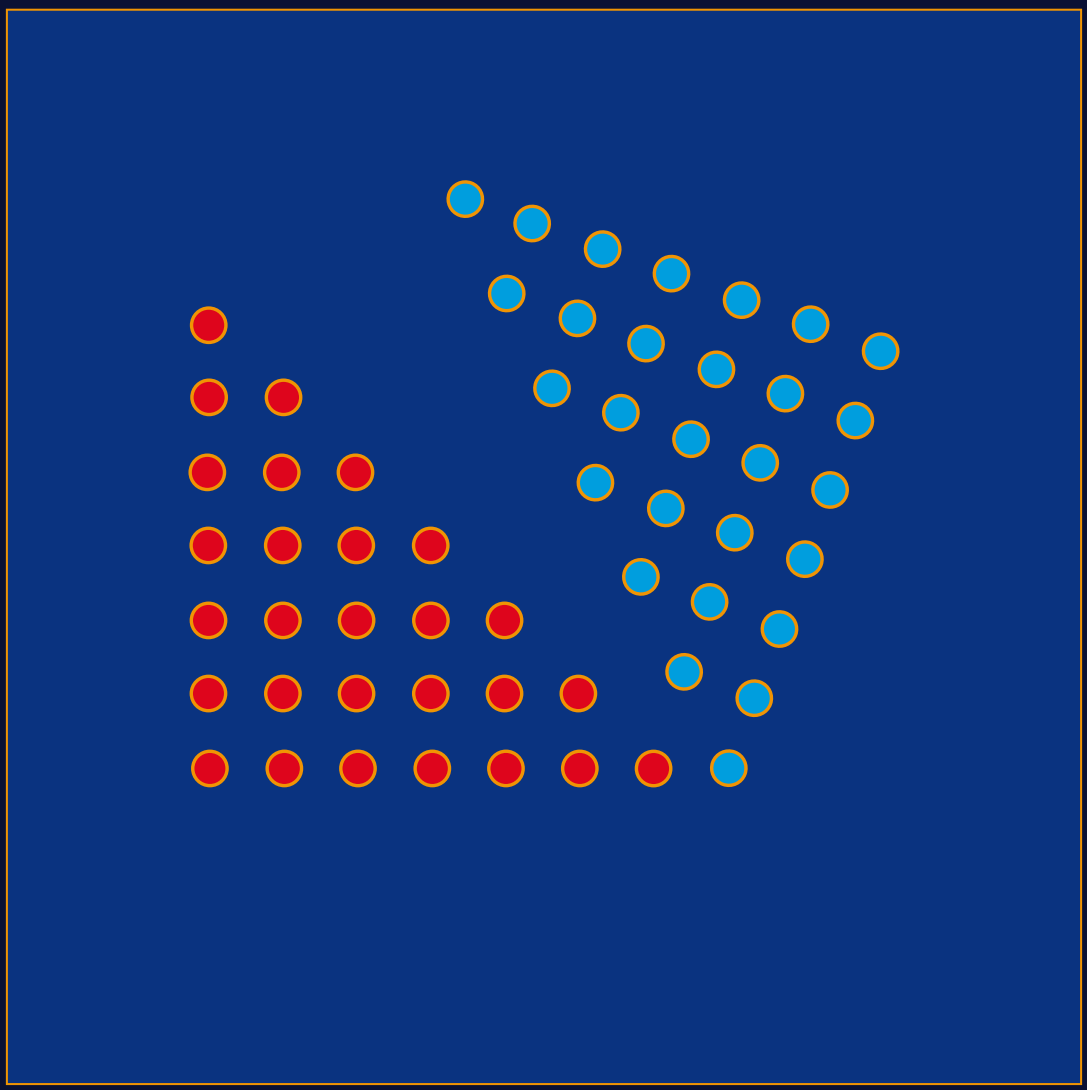
105

$1 + 2 + 3 + \ldots + n$



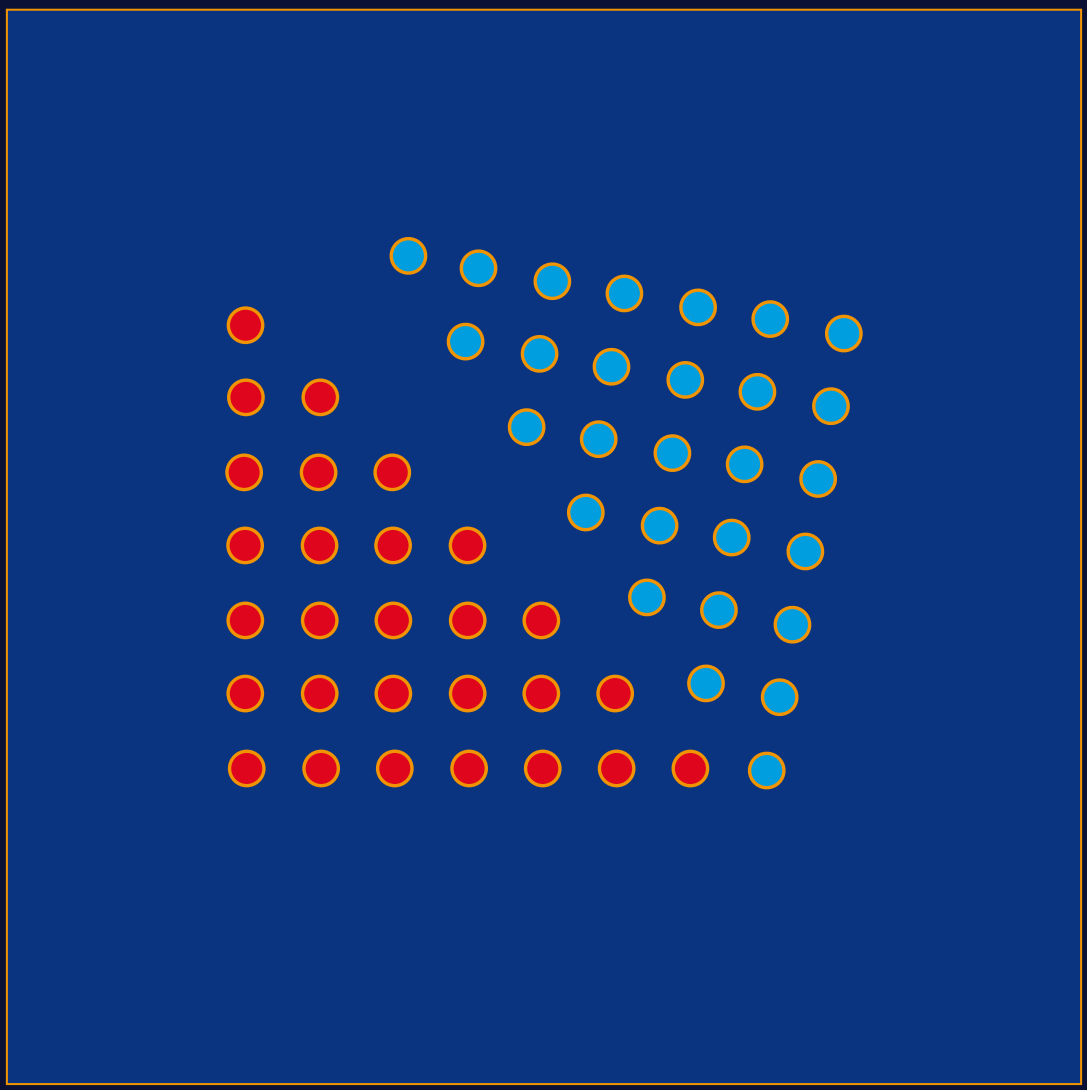
107

$1 + 2 + 3 + \ldots + n$



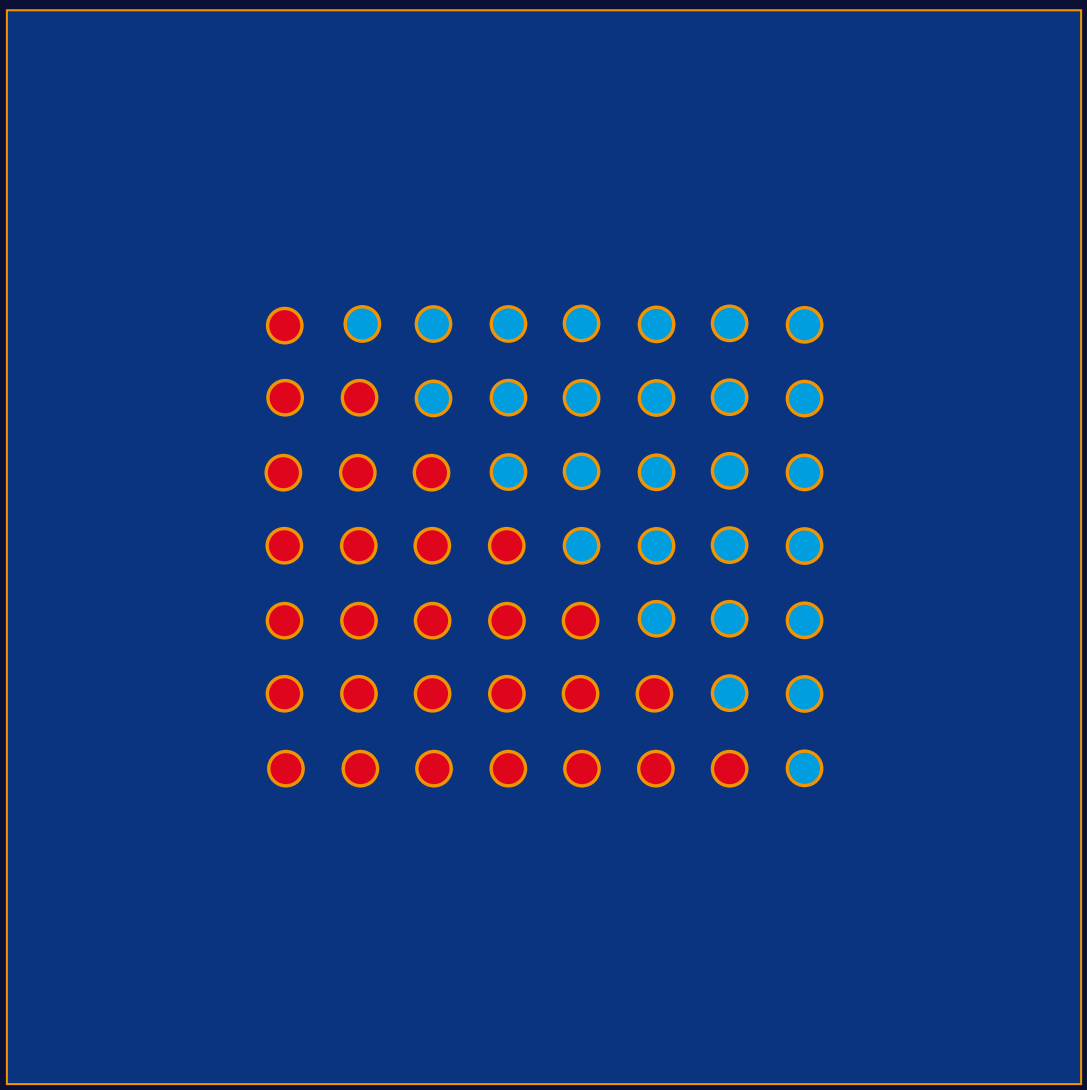
109

$1 + 2 + 3 + \ldots + n$

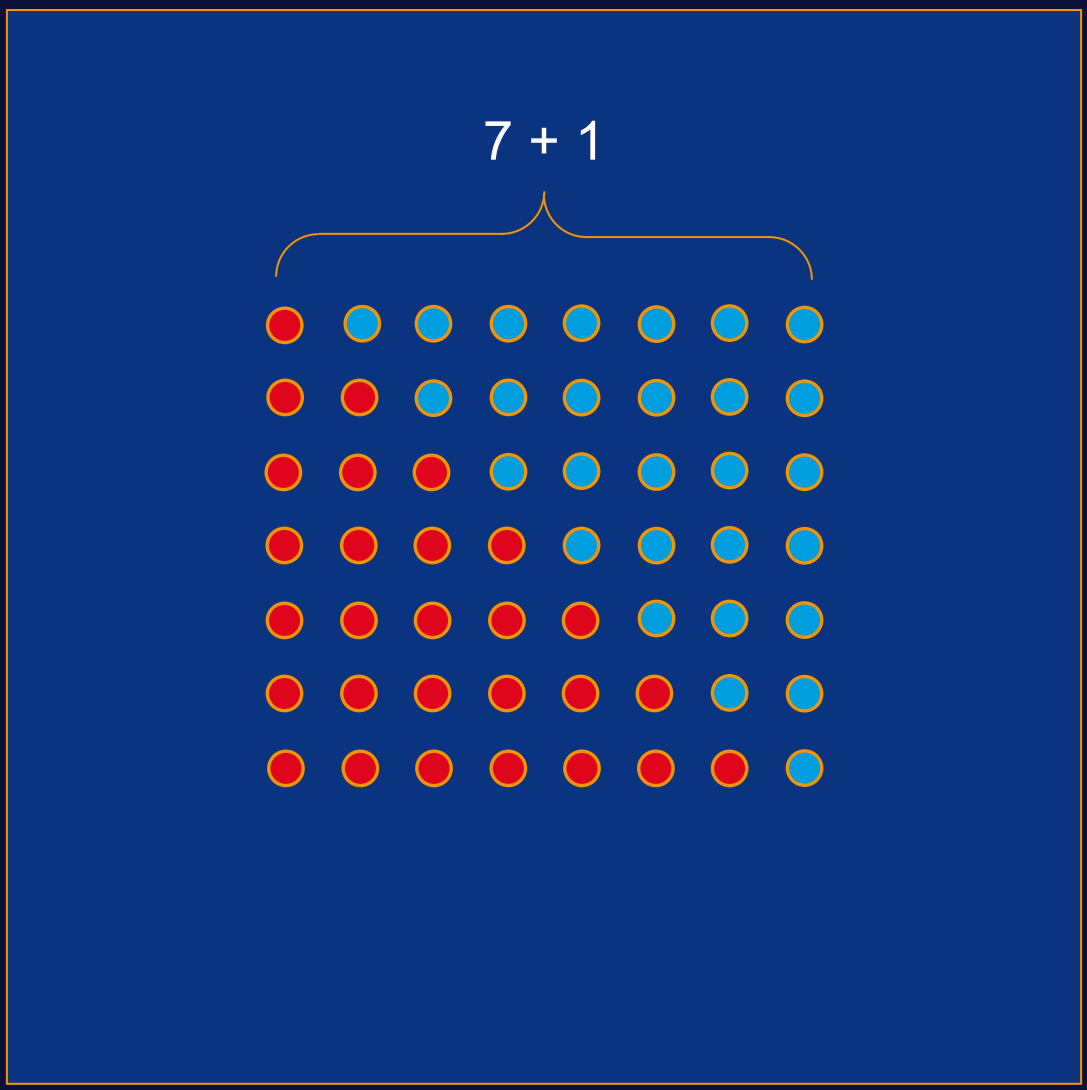


111

$1 + 2 + 3 + \ldots + n$

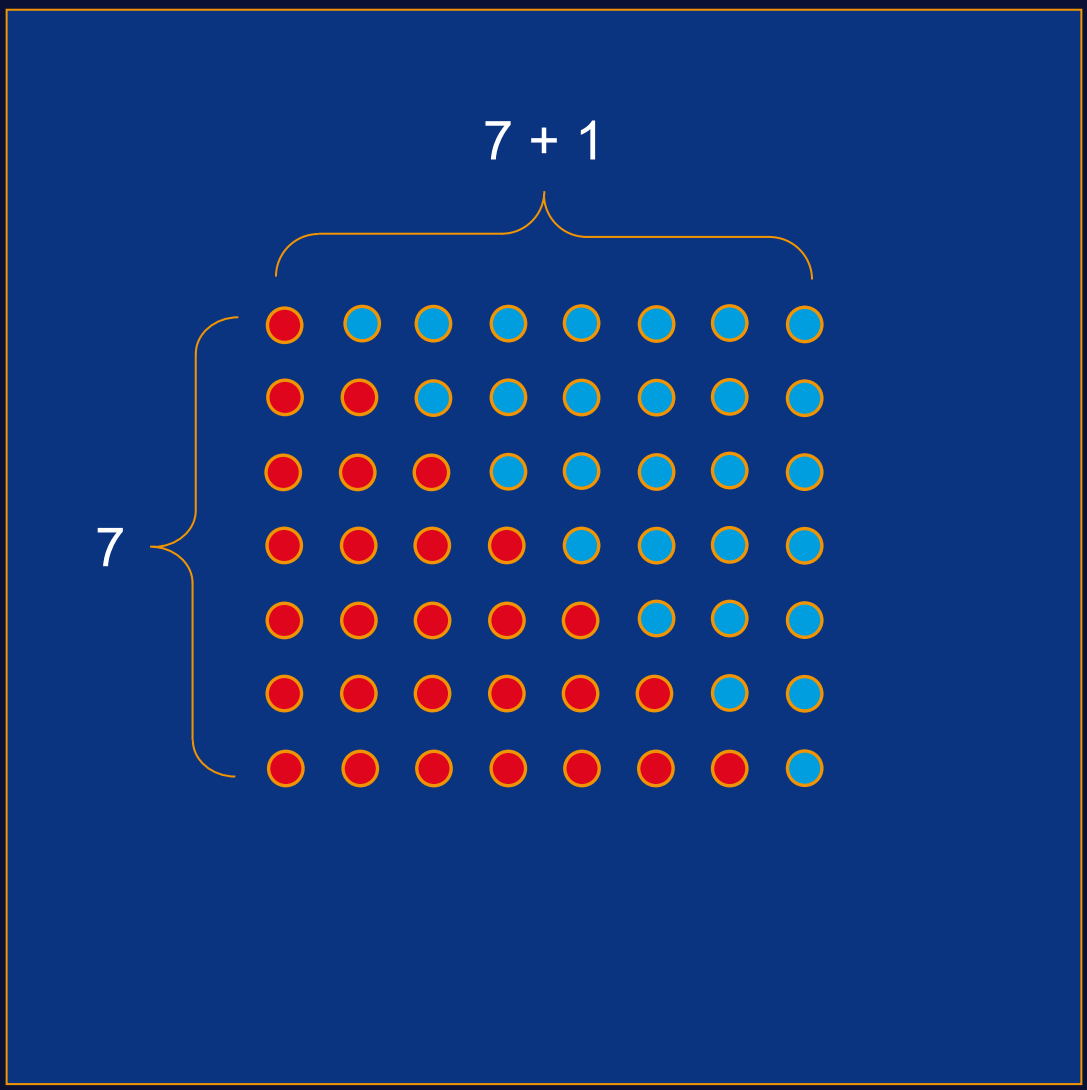


$1 + 2 + 3 + \ldots + n$

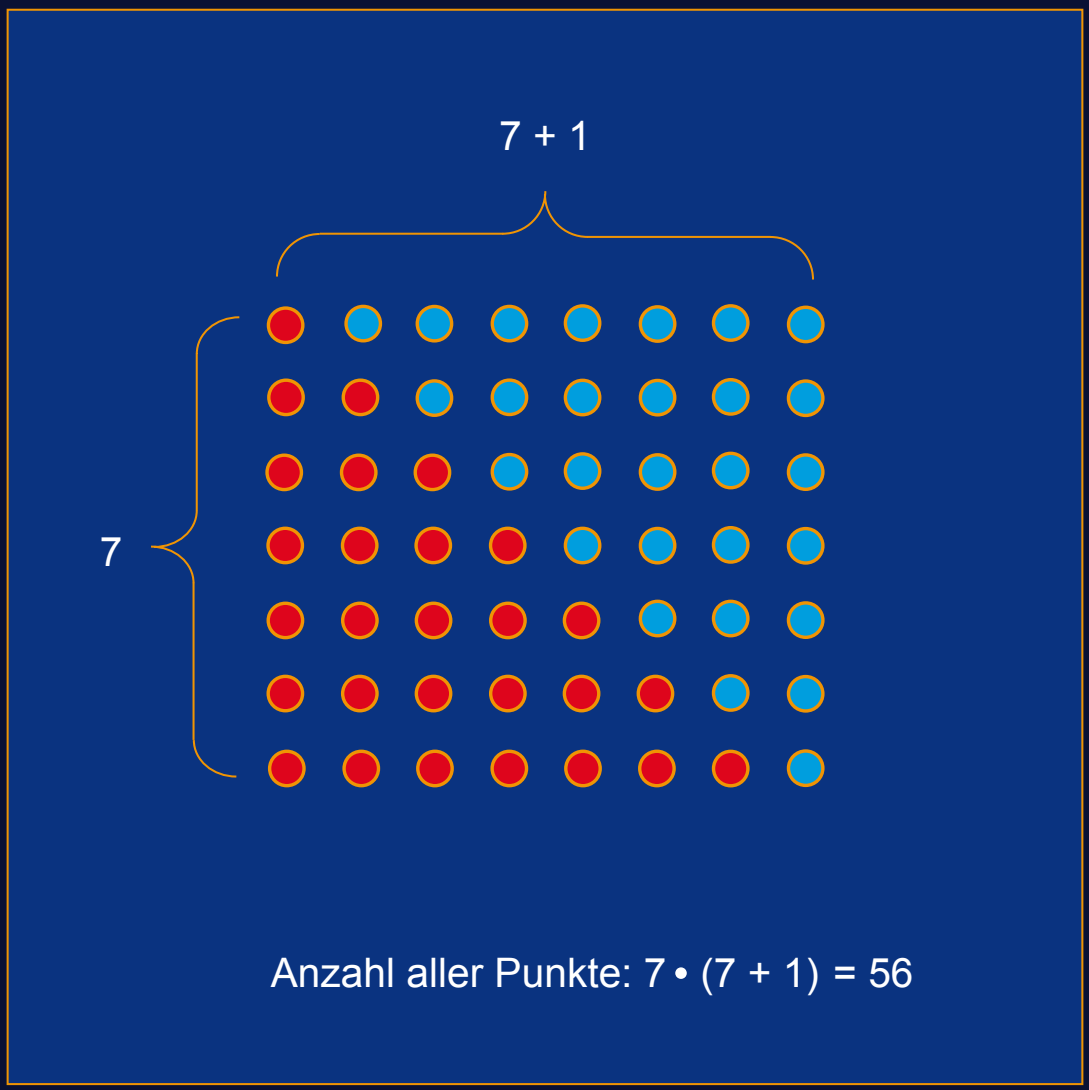


115

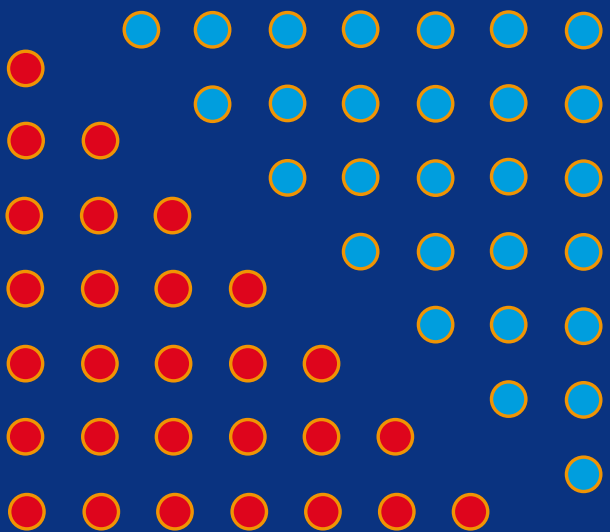
$1 + 2 + 3 + \ldots + n$



$1 + 2 + 3 + \ldots + n$



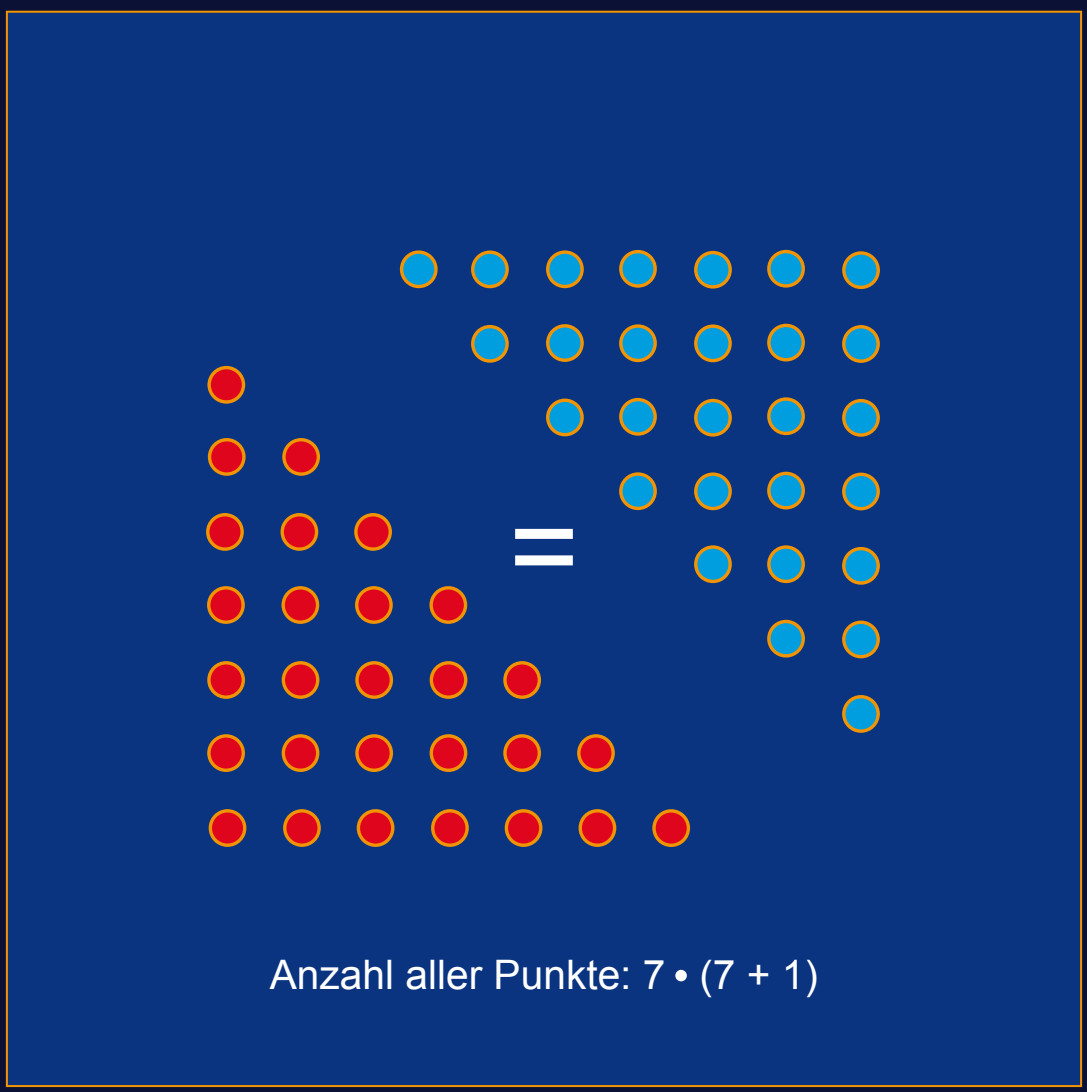
$1 + 2 + 3 + \ldots + n$



Anzahl aller Punkte: $7 \cdot (7 + 1)$

121

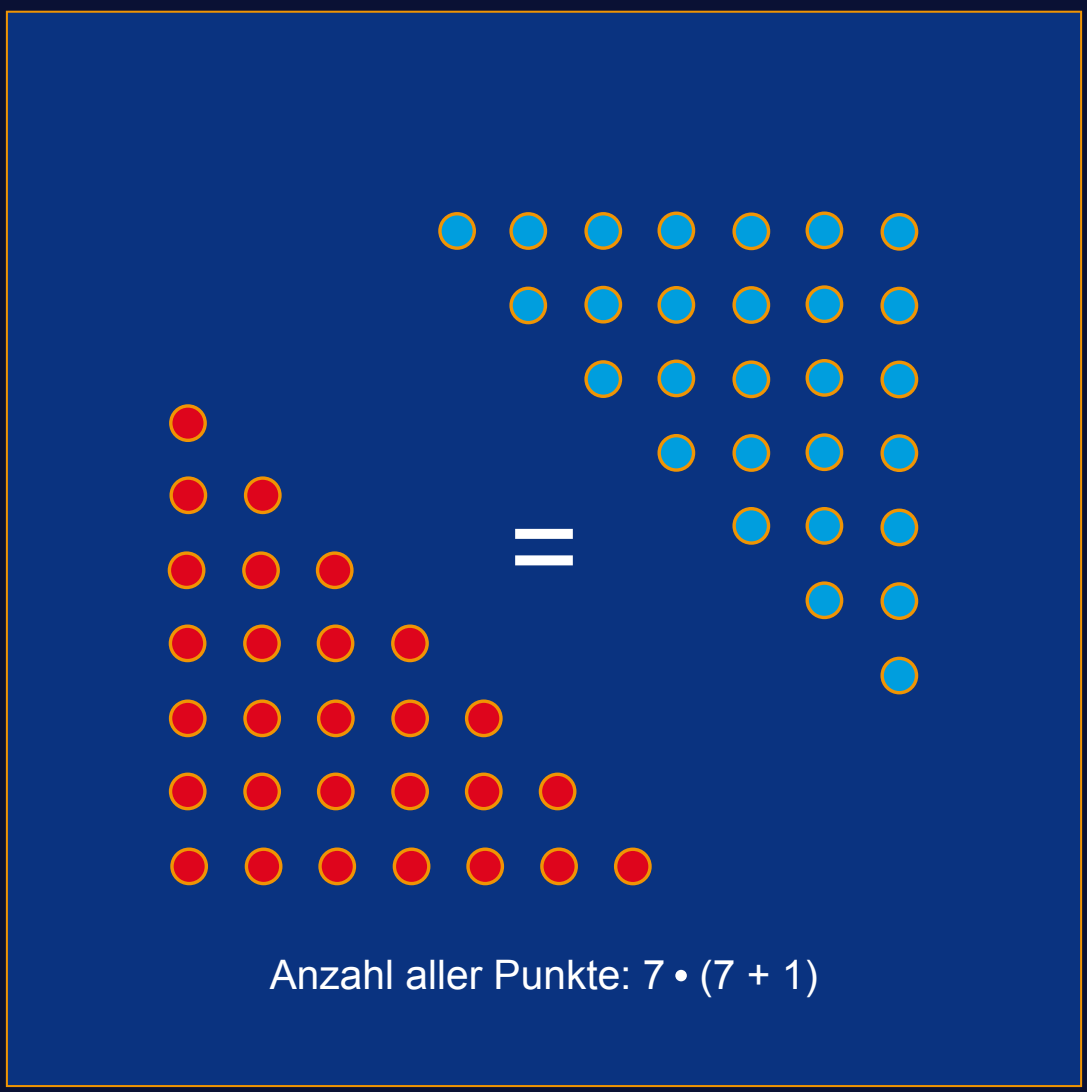
$1 + 2 + 3 + \ldots + n$



Anzahl aller Punkte: $7 \cdot (7 + 1)$

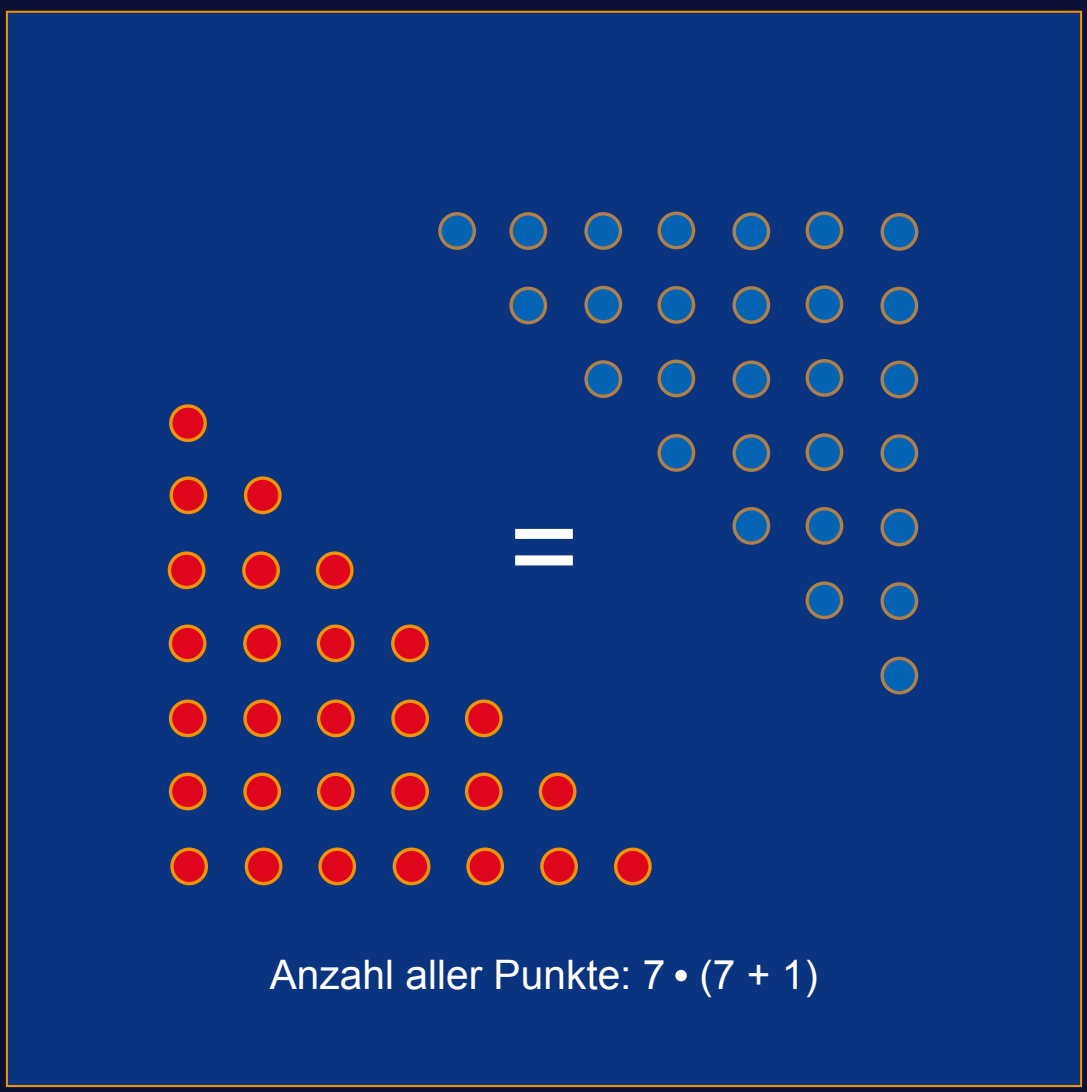
123

$1 + 2 + 3 + \ldots + n$

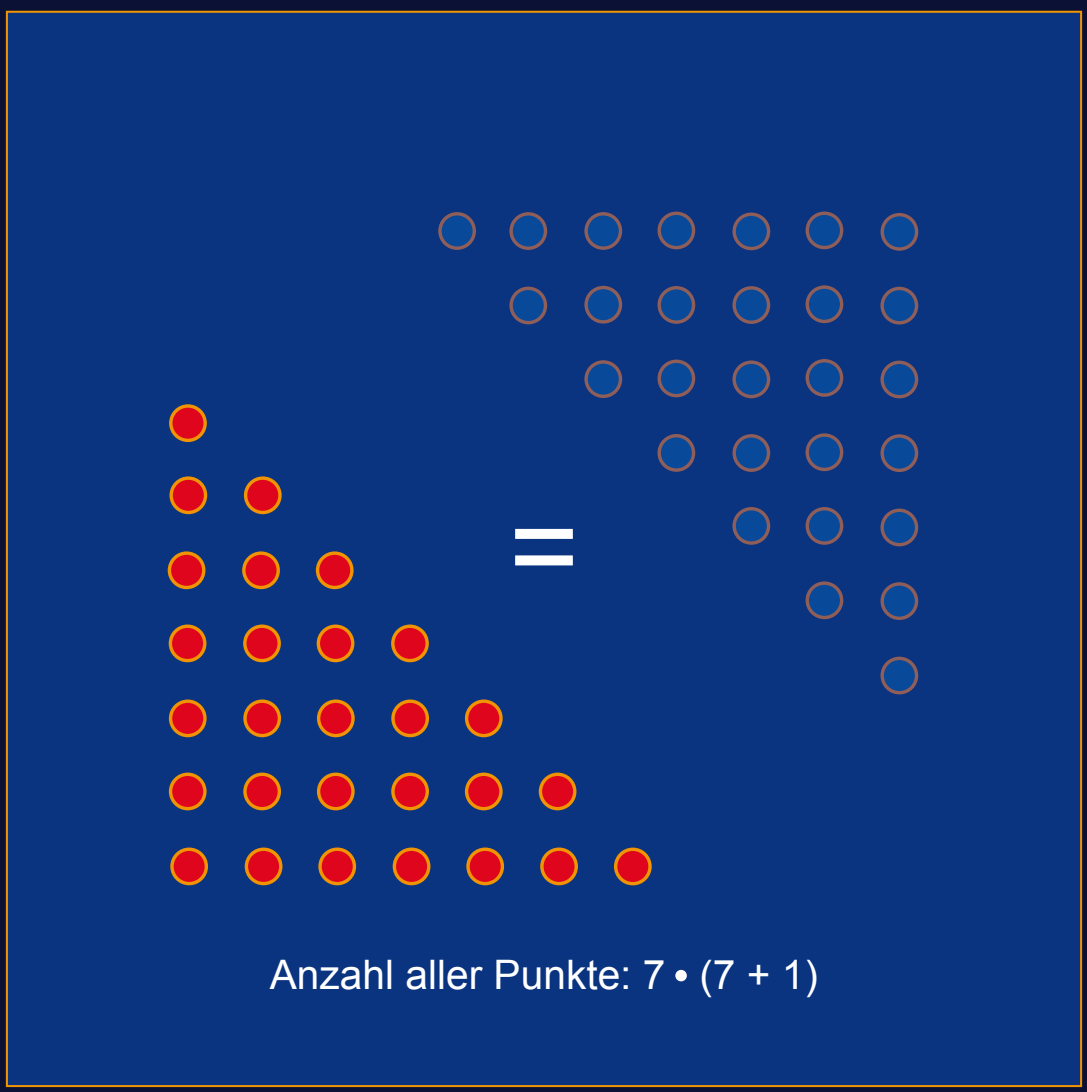


Anzahl aller Punkte: $7 \bullet (7 + 1)$

$1 + 2 + 3 + \ldots + n$

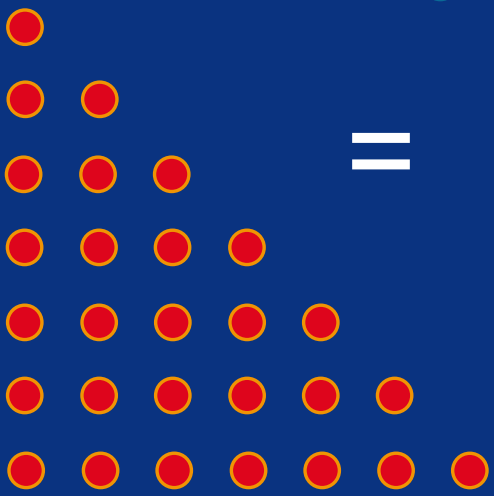


$1 + 2 + 3 + \ldots + n$



$1 + 2 + 3 + \ldots + n$

Die roten Punkte sind die Hälfte aller Punkte:

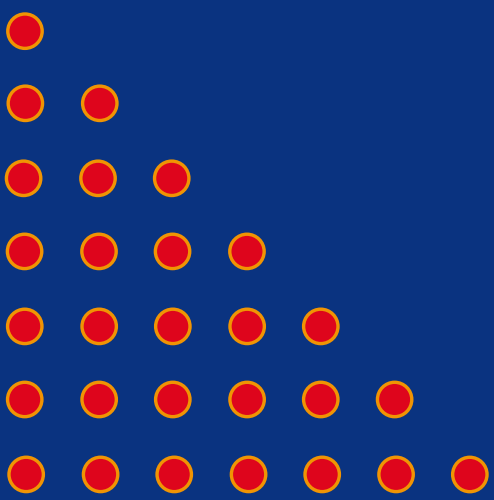


$$\frac{1 + 2 + 3 + 4 + 5 + 6 + 7}{2} = \frac{7 \cdot (7 + 1)}{2}$$

Anzahl aller Punkte: $7 \cdot (7 + 1)$

$$1 + 2 + 3 + \ldots + n$$

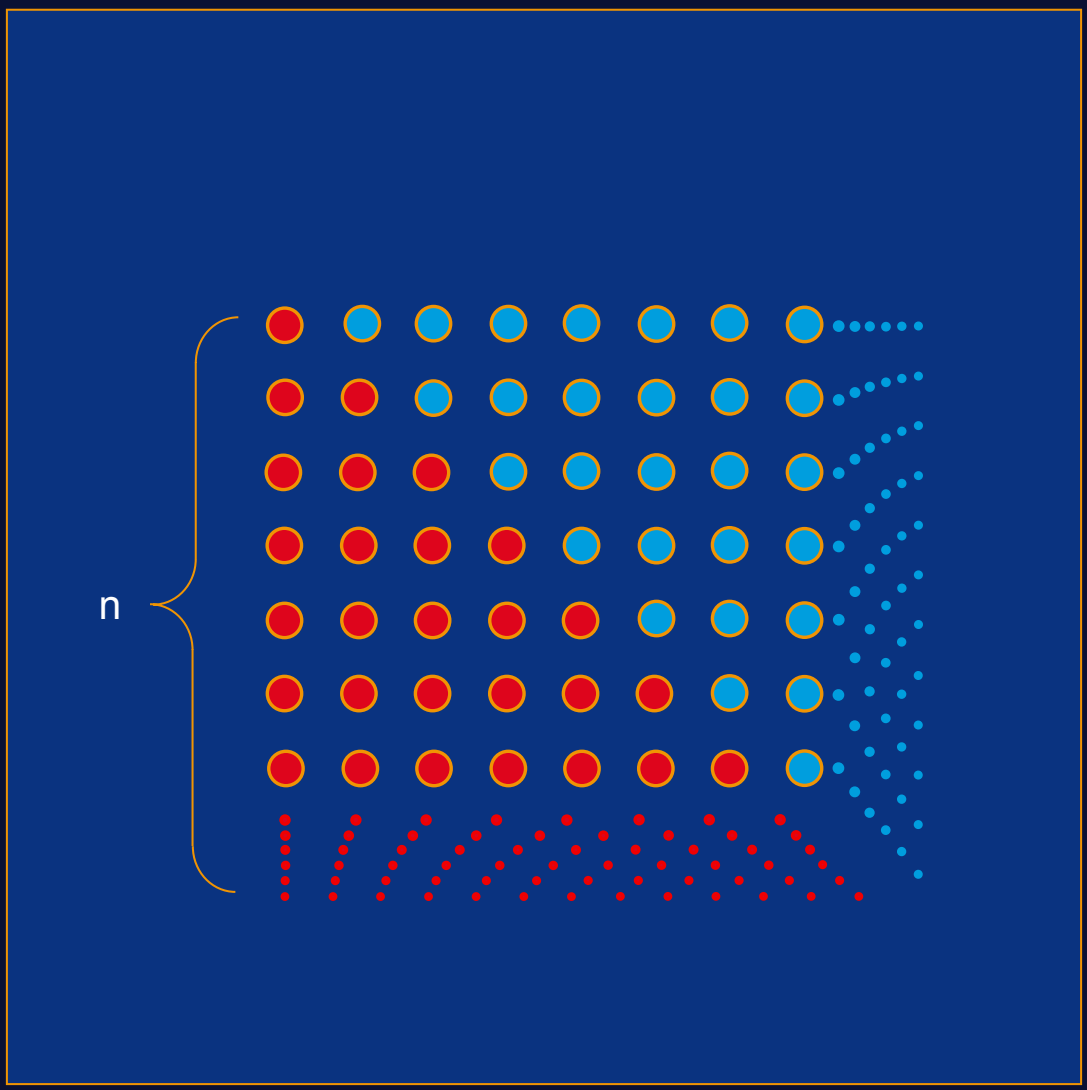
Die roten Punkte sind die Hälfte aller Punkte:



$$\frac{1 + 2 + 3 + 4 + 5 + 6 + 7}{2} = \frac{7 \cdot (7 + 1)}{2}$$

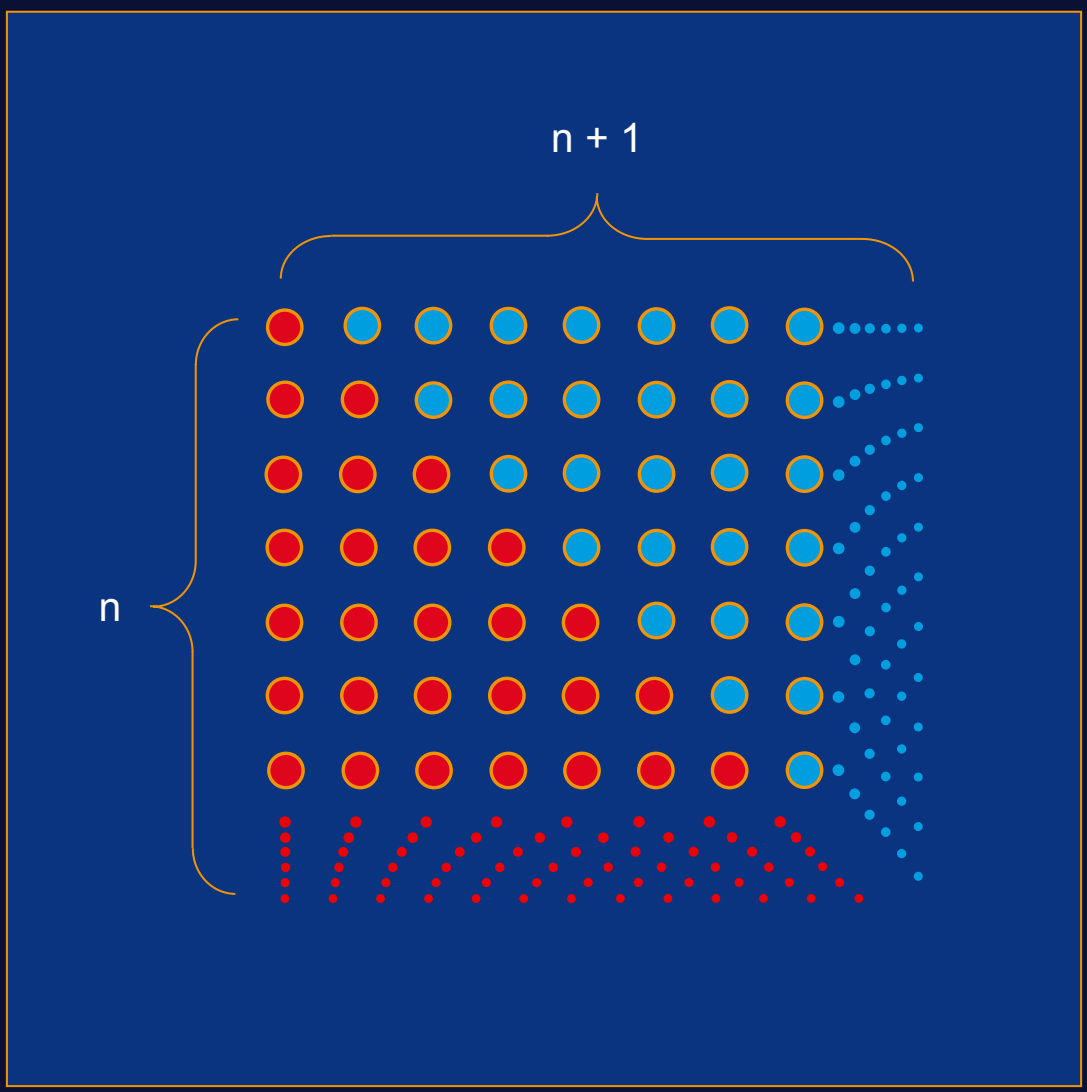
133

$1 + 2 + 3 + \ldots + n$



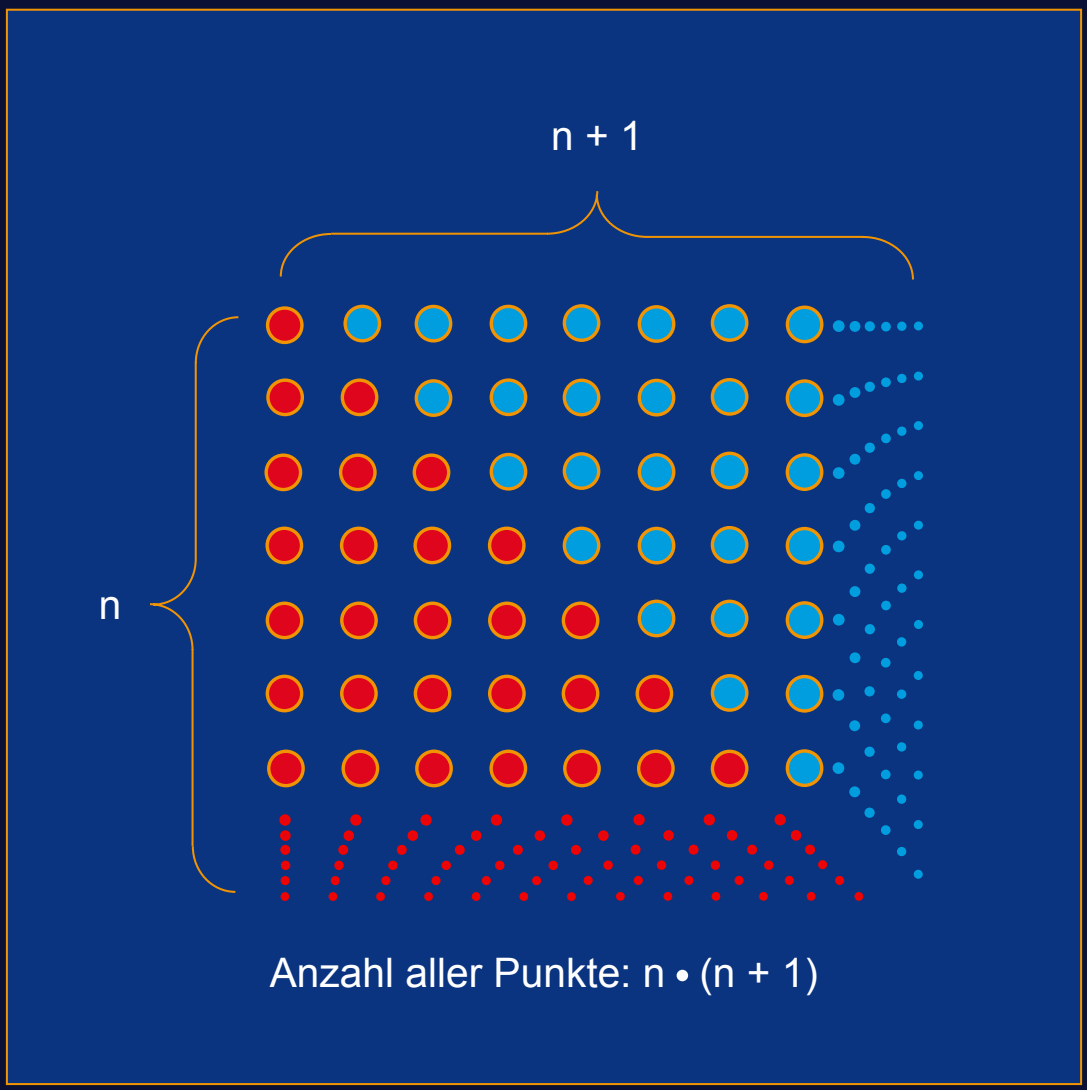
135

$1 + 2 + 3 + \ldots + n$



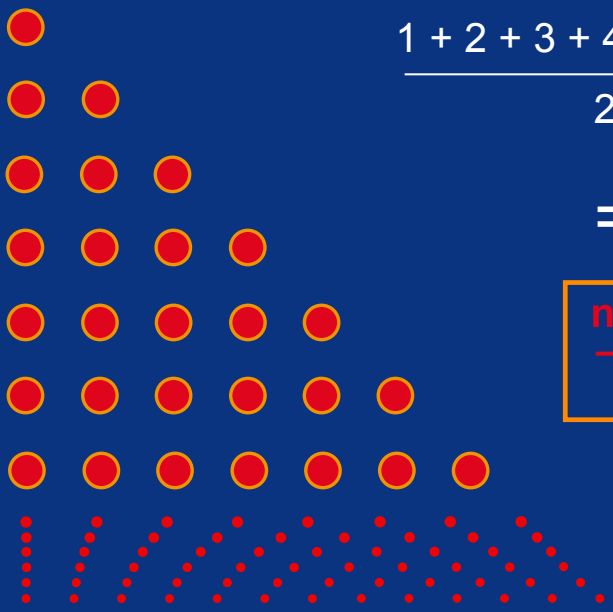
137

$1 + 2 + 3 + \ldots + n$



$$1 + 2 + 3 + \ldots + n$$

Die roten Punkte sind die Hälfte aller Punkte:



$$\frac{1 + 2 + 3 + 4 + \ldots + n}{2} = \boxed{\frac{n \cdot (n + 1)}{2}}$$

Mathematik?
Spiel!

realisierte Daumenkinos

- Scheitel-, Neben-, Wechsel-, Stufen-, Basiswinkel
- Winkelsumme im Dreieck
- Thaleskreis (Euklid, Elemente, Buch III)
- Pythagoras, Zerlegung (Euklid, Elemente, Buch I)
- Kathetensatz (Euklid, Elemente, Buch I)
- Höhensatz (Euklid, Elemente, Buch VI u. Buch II)
- Schnitte durch den Würfel
- Verfolgungskurve
- Möndchen des Hippokrates von Chios
- Ellipse im Kreis
- $(a + b + c + ...)^2$
- Hinged Tessellation

Daumenkinos in Planung

- Ellipse, Parabel, Hyperbel
- Hexe der Agnesi
- Satz von Morley
- Sinus
- Satz von Ceva
- Dreiecksgeometrie, Eulergerade
- von der Sekante zur Tangente
- Riemannsches Integral
- Flächenverwandlung
- Sprachspiele
- von 0 bis 100
- ...

Eugen Jost, CH-3604 Thun
eugenjost@bluewin.ch