

Read Pattern: → Static Pattern: →  $r=6$   $c=7$

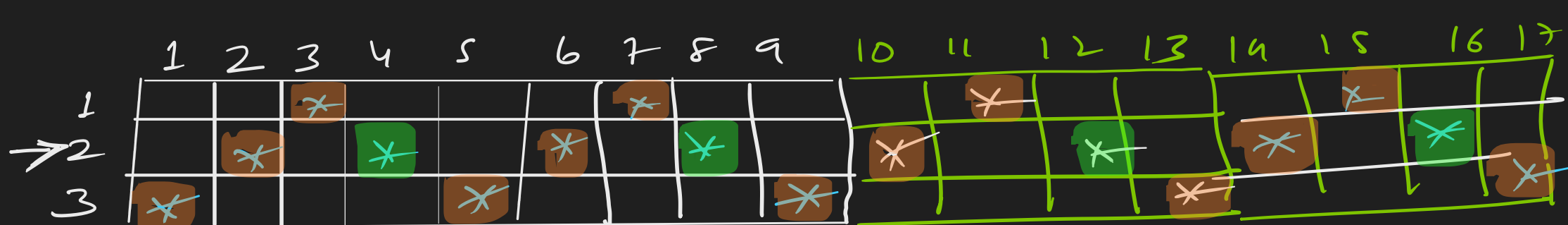
Rule 1: [Break into similar smaller parts]

$P1 \quad r=0 \quad C \quad 1, 2, 4, 5$   
 $\& \quad C \cdot 1 \cdot 3 \neq 0$   
 $P2 \quad r=1 \quad C \quad 0, 3, 6$   
 $\& \quad C \cdot 1 \cdot 3 = 0$   
 $P3 \quad r-c = 2$   
 $2-0 = 2$   
 $3-1 = 2$   
 $4-2 = 2$   
 $5-3 = 2$   
 $P4 \quad r+c = 8$   
 $2+6$   
 $3+5$   
 $4+4$

"x"

ZigZag Patterns: → (Dynamic Pattern) | 2 mins

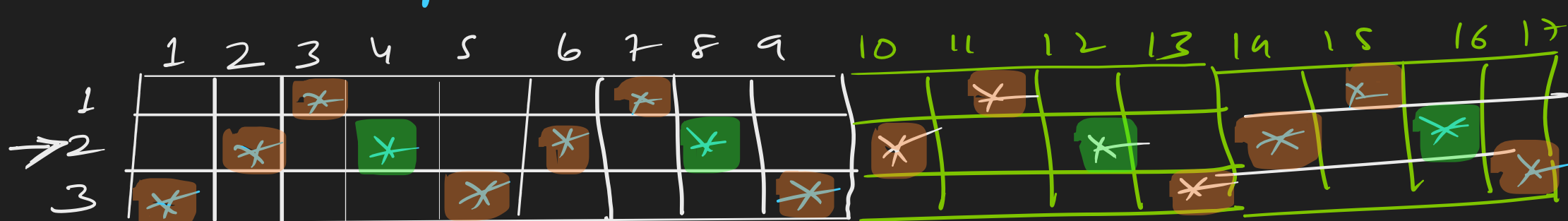
row is constant =  $r=3$   $c = 9, 13, 17, 21,$



G1: →  $(r+c) \% 4 = 0$

G2: →  $(r=2 \& \& C \% 4 = 0)$

Rule 2: If line is less — don't follow Rule 1



$R1 \rightarrow 3, 7, 11, 15 = C \% 4 = 3$   
 $R2 \rightarrow \text{Even Numbers} = C \% 2 = 0$   
 $R3 \rightarrow 1, 5, 9, 13, 17 = C \% 4 = 1$

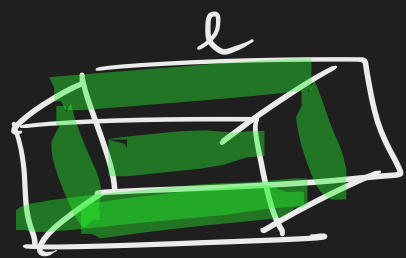
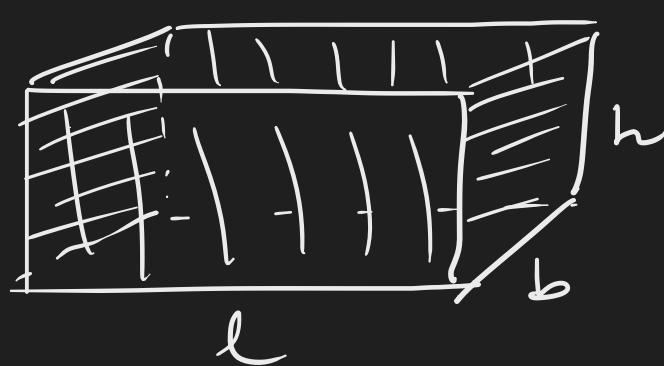
(4)

✓ \* Square of a number.

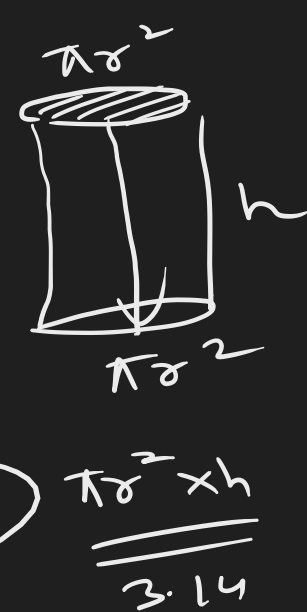
✓ \* Total Surface Area → Cube / Cuboid

✓ \* Volume of a Cylinder →  $\pi r^2 h$

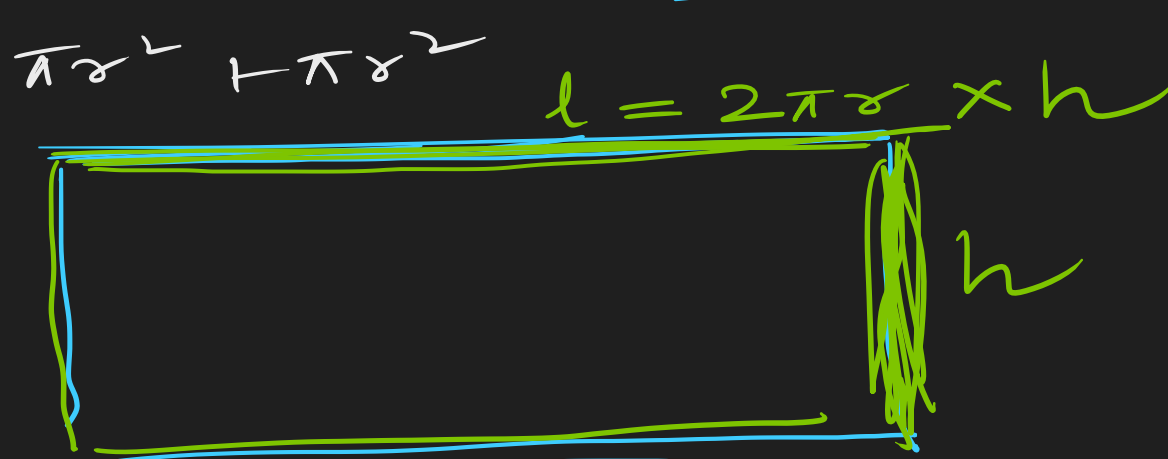
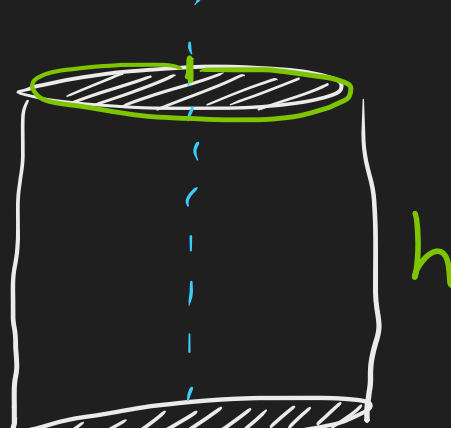
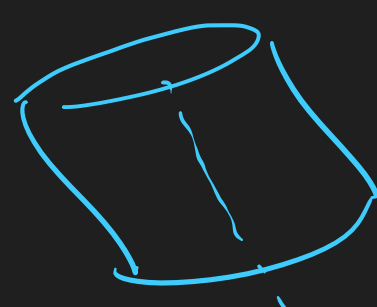
✓ \* TSA of a Cylinder →  $2\pi r(r+h)$



6 square faces  
 $6 \times l \times l$   
 $(6 l^2)$



$l \times b + l \times b + b \times h + b \times h + l \times h + l \times h$   
 $2lb + 2bh + 2lh = 2(lb + bh + lh)$



$\pi r^2 + \pi r^2 + 2\pi r h$   
 $2\pi r^2 + 2\pi r h$

$2\pi r(r+h)$