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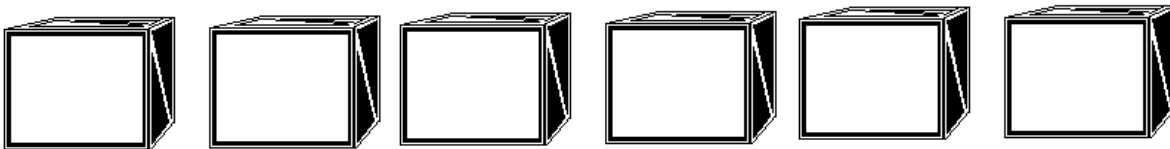
Duration: (30 minutes)

Lets Try It! Insertion Sort Algorithm

Step 1: Draw ,cut out, and number the figures below.

Step 2: Follow the steps of the **Insertion Sort Algorithm**.

Step 3: Record the number of steps require to complete the sorting process for the figures.



INSERTION SORT ALGORITHM

Master Theorem

If $T(n) = aT(\lceil n/b \rceil) + O(n^d)$

for constants $a > 0$, $b > 1$ and $d \geq 0$ then

$$T(n) = \begin{cases} O(n^d) & \text{if } d > \log_b a \\ O(n^d \log n) & \text{if } d = \log_b a \\ O(n^{\log_b a}) & \text{if } d < \log_b a \end{cases}$$