segment Addiliton
postulate
Foldable

## segment Addition Postulate



## $A C=120$. What are $A B$ and $B C$ ?


part

## Finished product

## segment Addition Postulate

$$
\text { A } \quad 4 x+6 \quad B \quad 7 x+15 \quad \text { C } \quad \begin{aligned}
& A C=120 \text {. What } \\
& \text { are } A B \text { and } B C \text { ? }
\end{aligned}
$$

Part 1 -part $2=$ Whole

- segment Addition postulate

| $A$ | $4 x+6$ |
| :--- | :--- |$\quad B 7 x+15 \quad C \quad A C=120$. What

$\overline{A B}+\overline{B C}=A C$

$=120$

$$
4 x+6+7 x+15=120
$$

$$
11 x+21=120
$$

$11 x=99$
$x=9$
$A B=4(9)+6=42$
$B C=7(9)+15=78$

