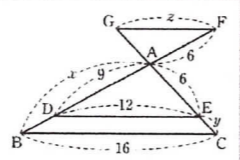


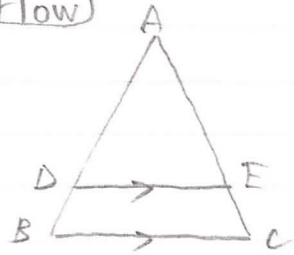
● 例題 6 三角形と比

教科書 p.127~131

右の図で、線分 DE, FG はどちらも BC に平行です。このとき、x, y, z の値を求めなさい。



How



BC // DE ならば、
 $AD = AB = AE = AC = DE = BC$

さらに、
 $AD : DB = AE : EC$

その逆も言える。

$$\begin{aligned} 9 : x &= 12 : 16 \\ 12x &= 144 \\ x &= 12 \end{aligned}$$

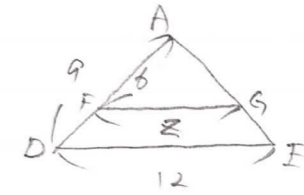
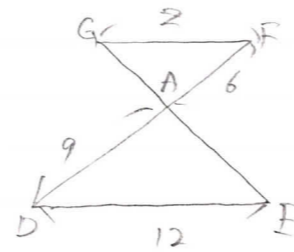
$$\begin{aligned} 12 : 16 \text{ を 先に} \\ 3 : 4 \text{ に } 12 \text{ を } \times \\ 9 : x &= 3 : 4 \\ 3x &= 36 \\ x &= 12 \end{aligned}$$

A. $x = 12$

$$\begin{aligned} 6 : y &= 9 : 3 \\ 9y &= 18 \\ y &= 2 \\ \text{上} : \text{下} &= \text{上} : \text{下} \end{aligned}$$

$$\begin{aligned} 6 : 6+y &= 9 : 12 \\ 9(6+y) &= 72 \\ 6+y &= 8 \\ y &= 2 \\ \text{上} : \text{全体} &= \text{上} : \text{全体} \end{aligned}$$

A. $y = 2$



$$\begin{aligned} 6 : 9 &= z : 12 \\ 9z &= 72 \\ z &= 8 \end{aligned}$$

$$\begin{aligned} 6 : 9 \text{ を 先に} &= \\ 2 : 3 \text{ に } 12 \text{ を } \times & \\ 2 : 3 = z : 12 & \\ 3z &= 24 \\ z &= 8 \end{aligned}$$

A. $z = 8$