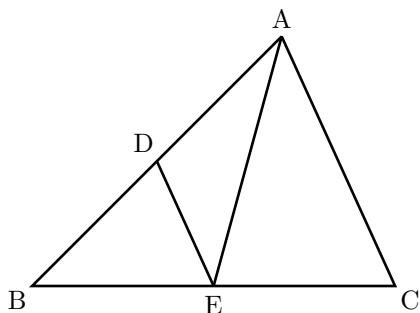


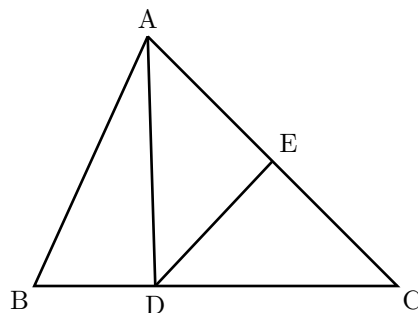
反射テスト 面積比 三角形 in 三角形 02

1. 下図の三角形の内部に面積比を書き込め。(S級45秒, A級1分, B級1分45秒, C級3分)

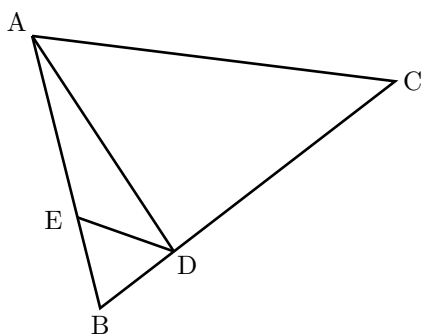
(1) $AD : DB = 1 : 1$, $BE : EC = 1 : 1$



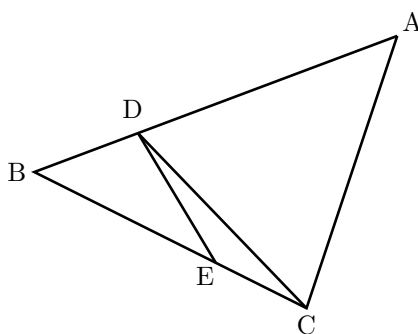
(2) $BD : DC = 1 : 2$, $AE : EC = 1 : 1$



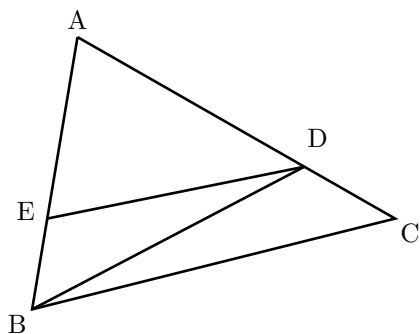
(3) $BD : DC = 1 : 3$, $AE : EB = 2 : 1$



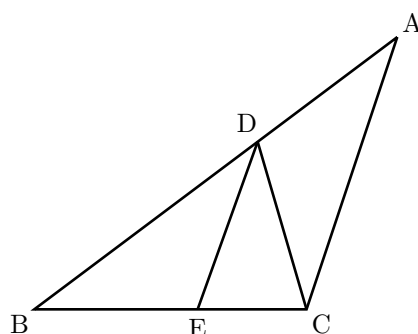
(4) $AD : DB = 5 : 2$, $BE : EC = 2 : 1$



(5) $AD : DC = 5 : 2$, $AE : EB = 2 : 1$

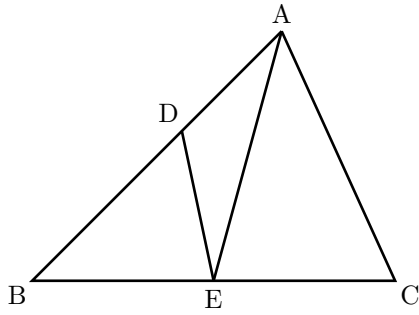


(6) $AD : DB = 5 : 8$, $BE : EC = 3 : 2$

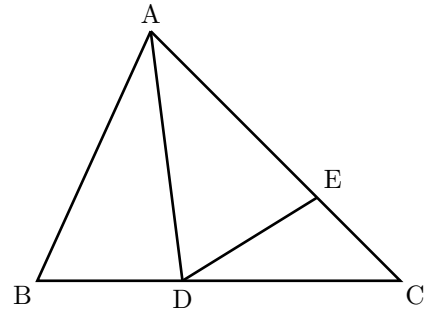


2. 下図の三角形の内部に面積比を書き込め。(S級50秒, A級1分20秒, B級2分, C級3分30秒)

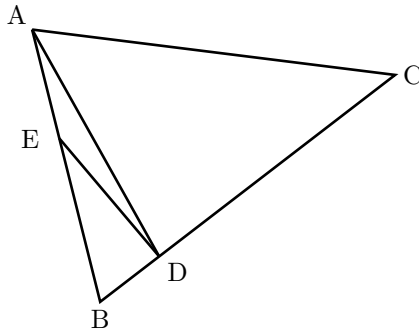
(1) $AD : DB = 2 : 3$, $BE : EC = 1 : 1$



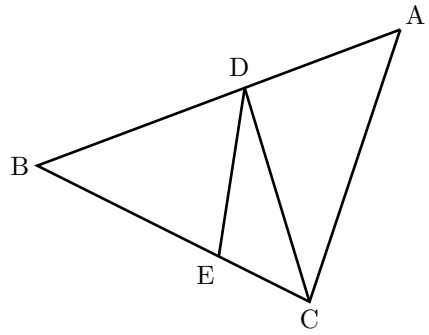
(2) $BD : DC = 2 : 3$, $AE : EC = 2 : 1$



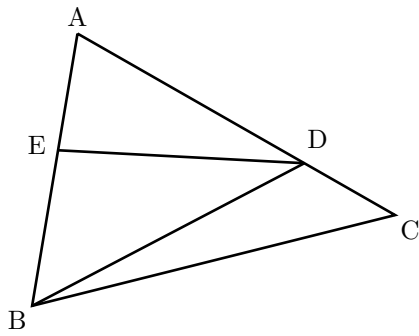
(3) $BD : DC = 1 : 4$, $AE : EB = 2 : 3$



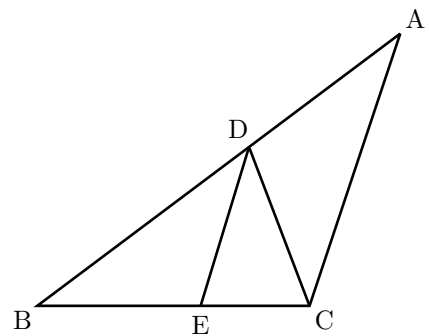
(4) $AD : DB = 3 : 4$, $BE : EC = 2 : 1$



(5) $AD : DC = 5 : 2$, $AE : EB = 3 : 4$



(6) $AD : DB = 5 : 7$, $BE : EC = 3 : 2$

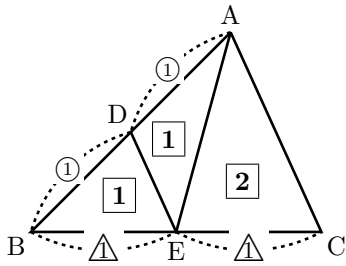


反射テスト 面積比 三角形 in 三角形 02 解答解説

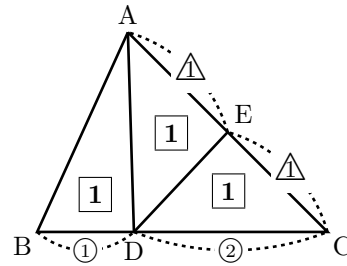
1. 下図の三角形の内部に面積比を書き込め。(S級45秒, A級1分, B級1分45秒, C級3分)

(1) $AD : DB = 1 : 1, BE : EC = 1 : 1$

(2) $BD : DC = 1 : 2, AE : EC = 1 : 1$



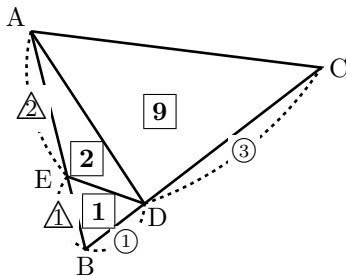
$$\begin{aligned} \triangle ADE : \triangle BED : \triangle AEC \\ &= (1 \times \triangle) : (1 \times \triangle) : (2 \times \triangle) \\ &= 1 : 1 : 2 \end{aligned}$$



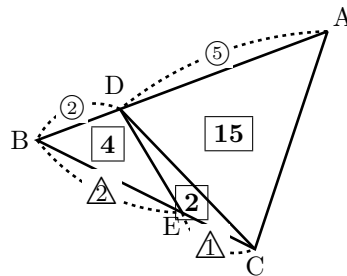
$$\begin{aligned} \triangle ABD : \triangle CED : \triangle ADE \\ &= (1 \times \triangle) : (2 \times \triangle) : (2 \times \triangle) \\ &= 2 : 2 : 2 = 1 : 1 : 1 \end{aligned}$$

(3) $BD : DC = 1 : 3, AE : EB = 2 : 1$

(4) $AD : DB = 5 : 2, BE : EC = 2 : 1$



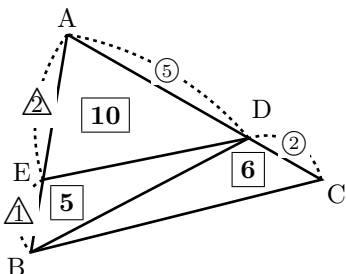
$$\begin{aligned} \triangle AED : \triangle BDE : \triangle ADC \\ &= (1 \times \triangle) : (1 \times \triangle) : (3 \times \triangle) \\ &= 2 : 1 : 9 \end{aligned}$$



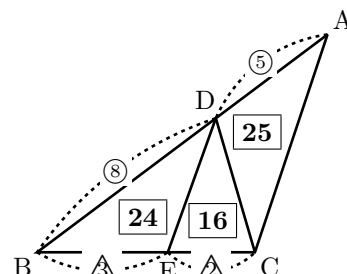
$$\begin{aligned} \triangle BED : \triangle CDE : \triangle ADC \\ &= (2 \times \triangle) : (2 \times \triangle) : (5 \times \triangle) \\ &= 4 : 2 : 15 \end{aligned}$$

(5) $AD : DC = 5 : 2, AE : EB = 2 : 1$

(6) $AD : DB = 5 : 8, BE : EC = 3 : 2$



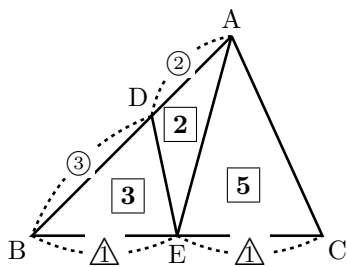
$$\begin{aligned} \triangle AED : \triangle BDE : \triangle BCD \\ &= (5 \times \triangle) : (5 \times \triangle) : (2 \times \triangle) \\ &= 10 : 5 : 6 \end{aligned}$$



$$\begin{aligned} \triangle BED : \triangle CDE : \triangle ADC \\ &= (8 \times \triangle) : (8 \times \triangle) : (5 \times \triangle) \\ &= 24 : 16 : 25 \end{aligned}$$

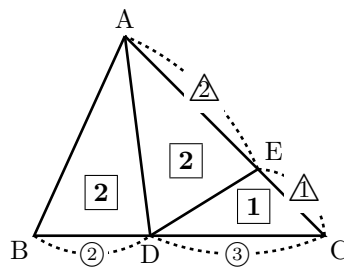
2. 下図の三角形の内部に面積比を書き込め。(S級50秒, A級1分20秒, B級2分, C級3分30秒)

(1) $AD : DB = 2 : 3$, $BE : EC = 1 : 1$



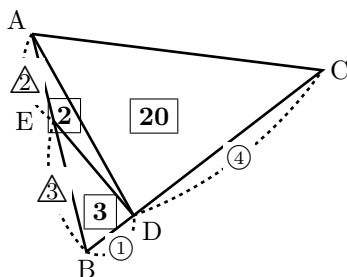
$$\begin{aligned} \triangle ADE : \triangle BED : \triangle AEC \\ &= (2 \times \triangle) : (3 \times \triangle) : (5 \times \triangle) \\ &= 2 : 3 : 5 \end{aligned}$$

(2) $BD : DC = 2 : 3$, $AE : EC = 2 : 1$



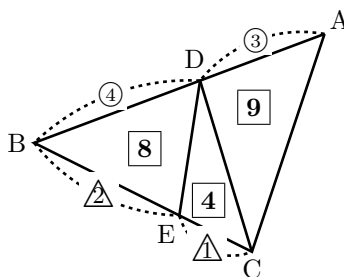
$$\begin{aligned} \triangle ABD : \triangle CED : \triangle ADE \\ &= (2 \times \triangle) : (3 \times \triangle) : (3 \times \triangle) \\ &= 6 : 3 : 6 = 2 : 1 : 2 \end{aligned}$$

(3) $BD : DC = 1 : 4$, $AE : EB = 2 : 3$



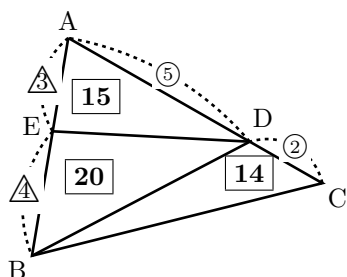
$$\begin{aligned} \triangle AED : \triangle BDE : \triangle ADC \\ &= (1 \times \triangle) : (1 \times \triangle) : (4 \times \triangle) \\ &= 2 : 3 : 20 \end{aligned}$$

(4) $AD : DB = 3 : 4$, $BE : EC = 2 : 1$



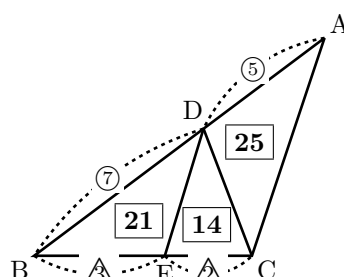
$$\begin{aligned} \triangle BED : \triangle CDE : \triangle ADC \\ &= (4 \times \triangle) : (4 \times \triangle) : (3 \times \triangle) \\ &= 8 : 4 : 9 \end{aligned}$$

(5) $AD : DC = 5 : 2$, $AE : EB = 3 : 4$



$$\begin{aligned} \triangle AED : \triangle BDE : \triangle BCD \\ &= (5 \times \triangle) : (5 \times \triangle) : (2 \times \triangle) \\ &= 15 : 20 : 14 \end{aligned}$$

(6) $AD : DB = 5 : 7$, $BE : EC = 3 : 2$



$$\begin{aligned} \triangle BED : \triangle CDE : \triangle ADC \\ &= (7 \times \triangle) : (7 \times \triangle) : (5 \times \triangle) \\ &= 21 : 14 : 25 \end{aligned}$$