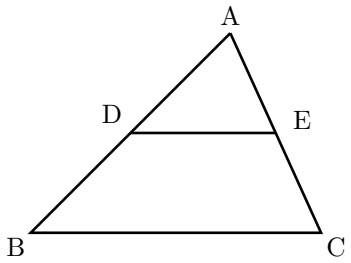
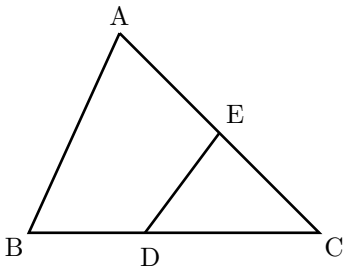
反射テスト　面積比　三角形&四角形 in 三角形　01

1.　下図の三角形の内部に面積比を書き込め. (S 級 55 秒, A 級 1 分 20 秒, B 級 2 分, C 級 3 分)

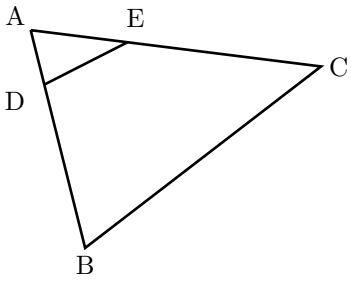
(1)　AD : DB = 1 : 1 ,　AE : EC = 1 : 1



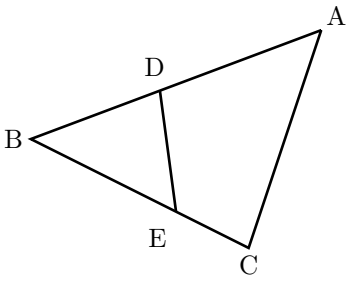
(2)　BD : DC = 2 : 3 ,　AE : EC = 1 : 1



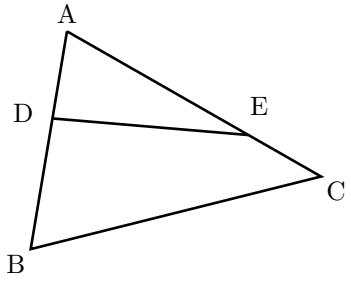
(3)　AE : EC = 1 : 2 ,　AD : DB = 1 : 3



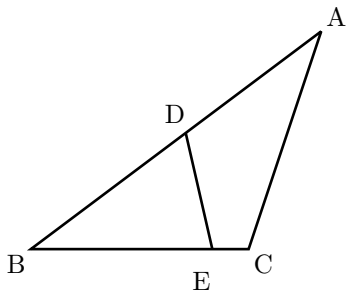
(4)　AD : DB = 5 : 4 ,　BE : EC = 2 : 1



(5)　AD : DB = 2 : 3 ,　AE : EC = 5 : 2

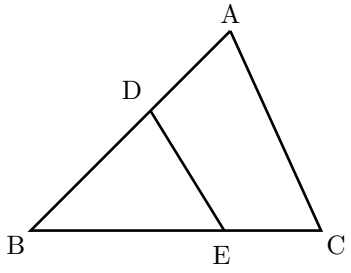


(6)　AD : DB = 7 : 8 ,　BE : EC = 5 : 1

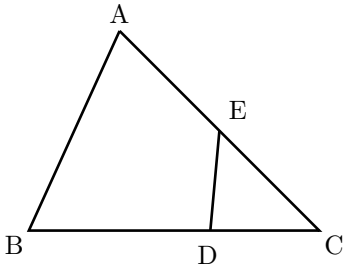


2.　下図の三角形の内部に面積比を書き込め.（ S 級 1 分 10 秒, A 級 1 分 45 秒, B 級 2 分 30 秒, C 級 4 分 ）

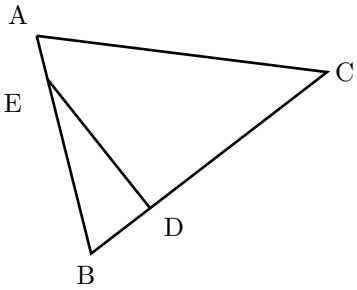
(1)　AD : DB = 2 : 3 ,　BE : EC = 2 : 1



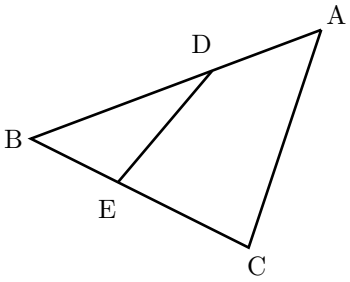
(2)　BD : DC = 5 : 3 ,　AE : EC = 1 : 1



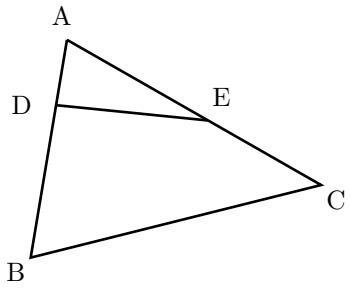
(3)　BD : DC = 1 : 4 ,　AE : EB = 1 : 5



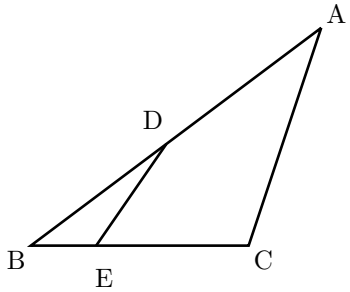
(4)　AD : DB = 3 : 5 ,　BE : EC = 2 : 3



(5)　AD : DB = 3 : 7 ,　AE : EC = 5 : 4



(6)　AD : DB = 8 : 7 ,　BE : EC = 3 : 7



反射テスト　面積比　三角形&四角形 in 三角形　01　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 55 秒, A 級 1 分 20 秒, B 級 2 分, C 級 3 分)

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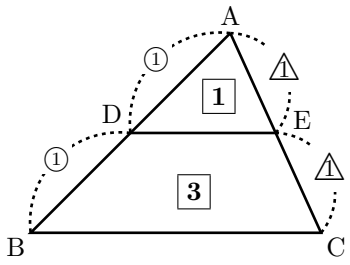
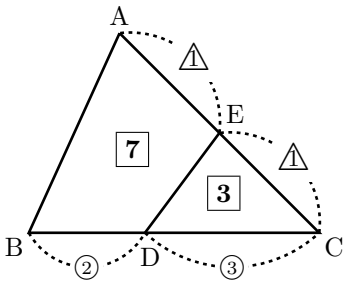


△ADE : △ABC = $\left(① \times \triangle 1\right) : \left(② \times \triangle 2\right) = \boxed{1} : \boxed{4}$

⇒　台形 DBCE = $\boxed{4} - \boxed{1} = \boxed{3}$

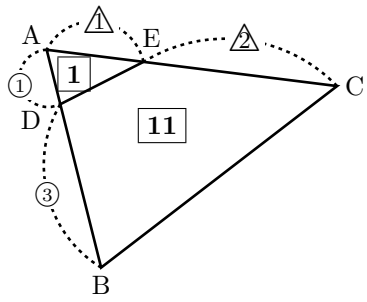
(2)　BD : DC = 2 : 3 ,　AE : EC = 1 : 1



△ADE : △ABC = $\left(③ \times \triangle 1\right) : \left(⑤ \times \triangle 2\right) = \boxed{3} : \boxed{10}$

⇒　四角形 EABD = $\boxed{10} - \boxed{3} = \boxed{7}$

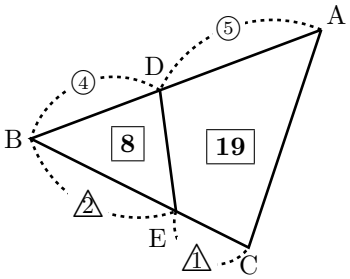
(3)　AE : EC = 1 : 2 ,　AD : DB = 1 : 3



△ADE : △ABC = $\left(① \times \triangle 1\right) : \left(④ \times \triangle 3\right) = \boxed{1} : \boxed{12}$

⇒　四角形 DBCE = $\boxed{12} - \boxed{1} = \boxed{11}$

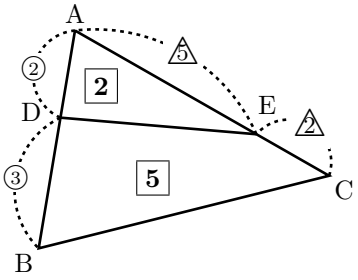
(4)　AD : DB = 5 : 4 ,　BE : EC = 2 : 1



△ADE : △ABC = $\left(④ \times \triangle 2\right) : \left(⑨ \times \triangle 3\right) = \boxed{8} : \boxed{27}$

⇒　四角形 ECAD = $\boxed{27} - \boxed{8} = \boxed{19}$

(5)　AD : DB = 2 : 3 ,　AE : EC = 5 : 2

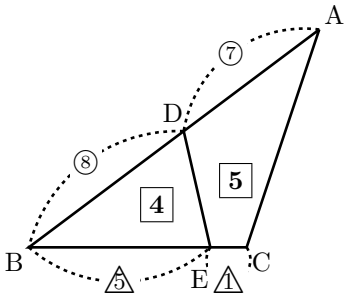


△ADE : △ABC = $\left(② \times \triangle 5\right) : \left(⑤ \times \triangle 7\right)$

$= 10 : 35 = \boxed{2} : \boxed{7}$

⇒　四角形 DBCE = $\boxed{7} - \boxed{2} = \boxed{5}$

(6)　AD : DB = 7 : 8 ,　BE : EC = 5 : 1



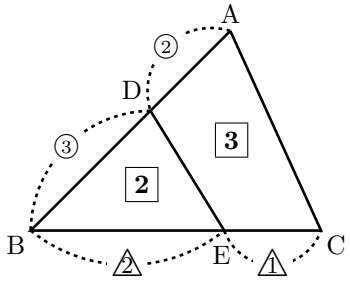
△ADE : △ABC = $\left(⑧ \times \triangle 5\right) : \left(⑮ \times \triangle 6\right)$

$= 40 : 90 = \boxed{4} : \boxed{9}$

⇒　四角形 ECAD = $\boxed{9} - \boxed{4} = \boxed{5}$

2.　下図の三角形の内部に面積比を書き込め．（ S 級 1 分 10 秒，A 級 1 分 45 秒，B 級 2 分 30 秒，C 級 4 分 ）

(1)　AD : DB = 2 : 3 ，　BE : EC = 2 : 1

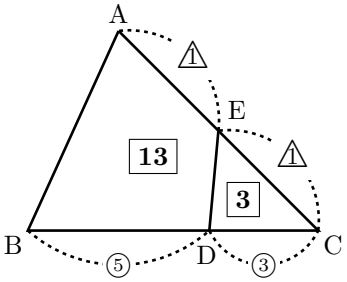


$\triangle ADE : \triangle ABC = \left(③ \times \triangle 2\right) : \left(⑤ \times \triangle 3\right)$

$= 6 : 15 = \boxed{2} : \boxed{5}$

$\Rightarrow$　四角形 ECAD $= \boxed{5} - \boxed{2} = \boxed{3}$

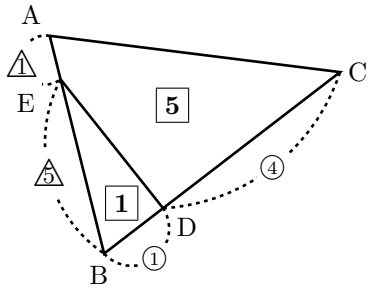
(2)　BD : DC = 5 : 3 ，　AE : EC = 1 : 1



$\triangle ADE : \triangle ABC = \left(③ \times \triangle 1\right) : \left(⑧ \times \triangle 2\right) = \boxed{3} : \boxed{16}$

$\Rightarrow$　四角形 EABD $= \boxed{16} - \boxed{3} = \boxed{13}$

(3)　BD : DC = 1 : 4 ，　AE : EB = 1 : 5

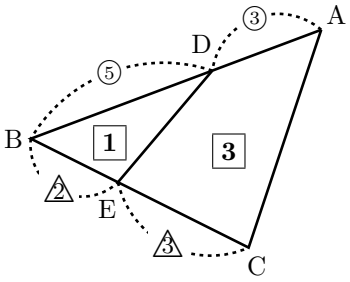


$\triangle ADE : \triangle ABC = \left(① \times \triangle 5\right) : \left(⑤ \times \triangle 6\right)$

$= 5 : 30 = \boxed{1} : \boxed{6}$

$\Rightarrow$　四角形 DCAE $= \boxed{6} - \boxed{1} = \boxed{5}$

(4)　AD : DB = 3 : 5 ，　BE : EC = 2 : 3

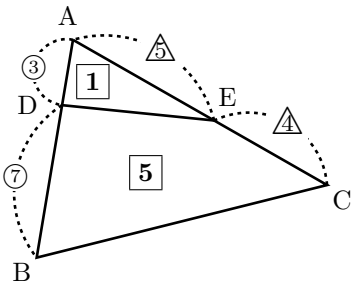


$\triangle ADE : \triangle ABC = \left(⑤ \times \triangle 2\right) : \left(⑧ \times \triangle 5\right)$

$= 10 : 40 = \boxed{1} : \boxed{4}$

$\Rightarrow$　四角形 ECAD $= \boxed{4} - \boxed{1} = \boxed{3}$

(5)　AD : DB = 3 : 7 ，　AE : EC = 5 : 4

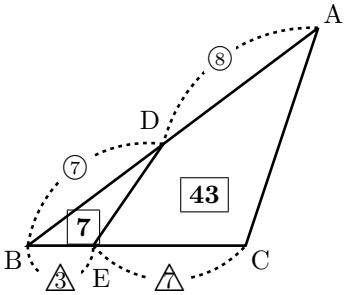


$\triangle ADE : \triangle ABC = \left(③ \times \triangle 5\right) : \left(⑩ \times \triangle 9\right)$

$= 15 : 90 = \boxed{1} : \boxed{6}$

$\Rightarrow$　四角形 DBCE $= \boxed{6} - \boxed{1} = \boxed{5}$

(6)　AD : DB = 8 : 7 ，　BE : EC = 3 : 7



$\triangle ADE : \triangle ABC = \left(⑦ \times \triangle 3\right) : \left(⑮ \times \triangle 10\right)$

$= 21 : 150 = \boxed{7} : \boxed{50}$

$\Rightarrow$　四角形 ECAD $= \boxed{50} - \boxed{7} = \boxed{43}$