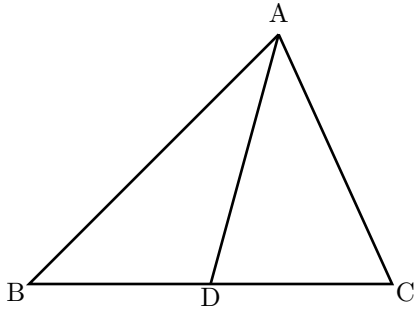


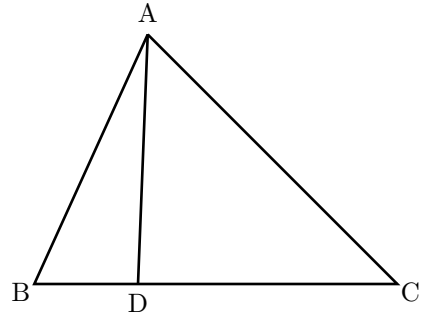
反射テスト 面積比 三角形 01

1. 下図の三角形の内部に面積比を書き込め。(S級 18秒, A級 25秒, B級 40秒, C級 1分)

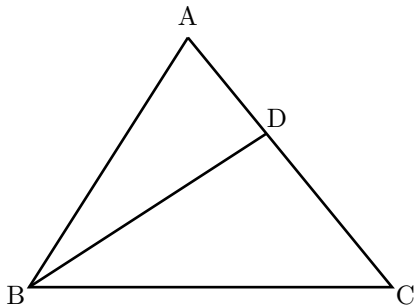
(1) $BD : DC = 1 : 1$



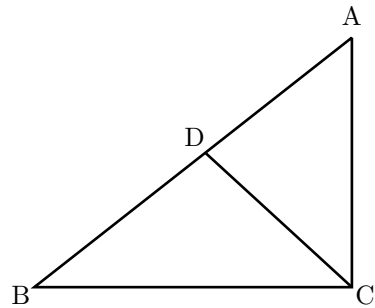
(2) $BD : DC = 2 : 5$



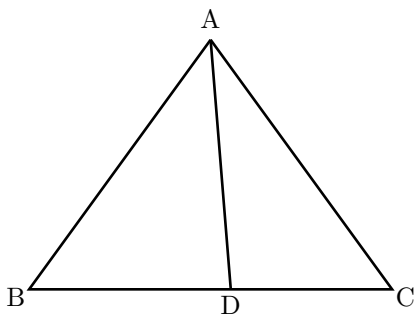
(3) $AD : DC = 5 : 8$



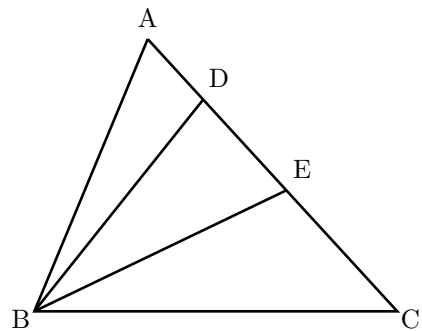
(4) $AD : DB = 6 : 7$



(5) $BD = 4 \text{ cm}, DC = 3.2 \text{ cm}$

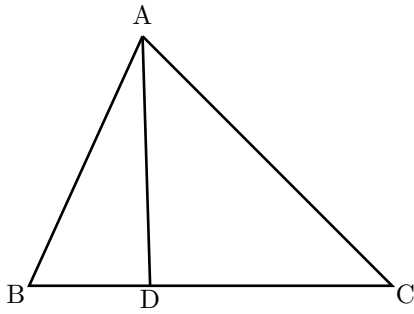


(6) $AD : DE : EC = 2 : 3 : 4$

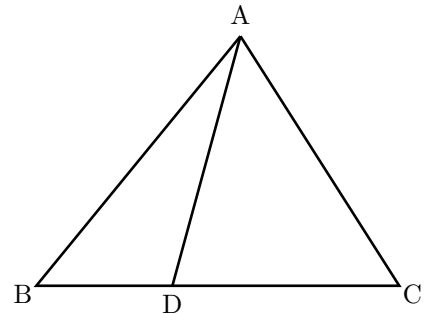


2. 下図の三角形の内部に面積比を書き込め。(S級 20秒, A級 28秒, B級 45秒, C級 1分10秒)

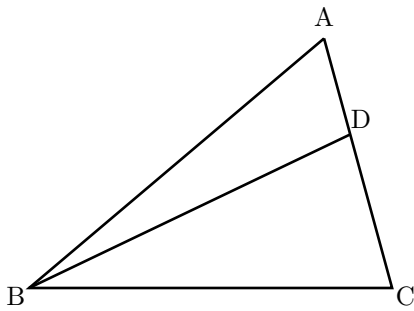
(1) $BD : DC = 1 : 2$



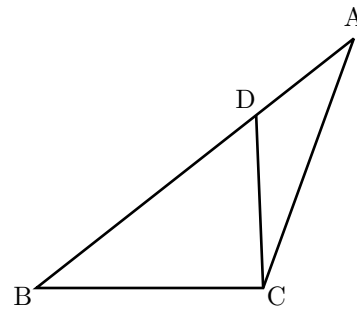
(2) $BD : DC = 3 : 5$



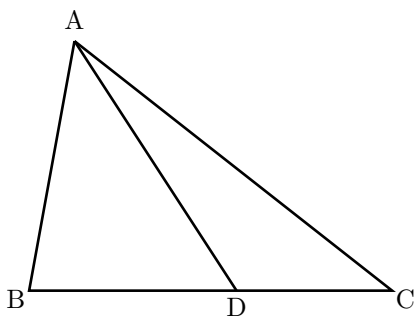
(3) $AD : DC = 5 : 9$



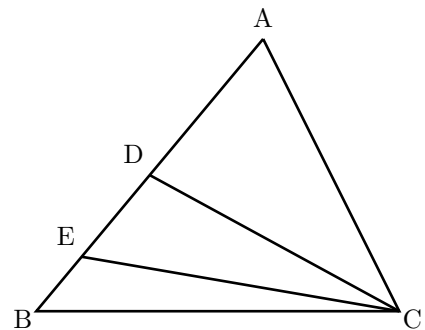
(4) $AD : DB = 4 : 9$



(5) $BD = 4\frac{1}{2} \text{ cm}, DC = 3\frac{3}{8} \text{ cm}$

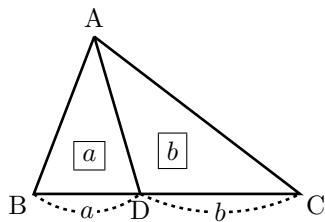


(6) $AD : DE : EB = 5 : 3 : 2$



反射テスト 面積比 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 18秒, A級 25秒, B級 40秒, C級 1分)



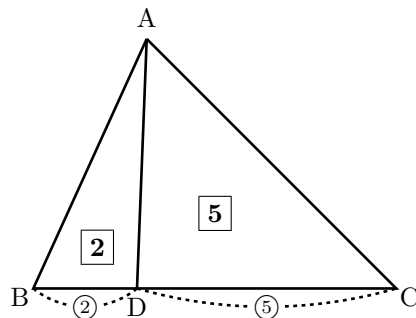
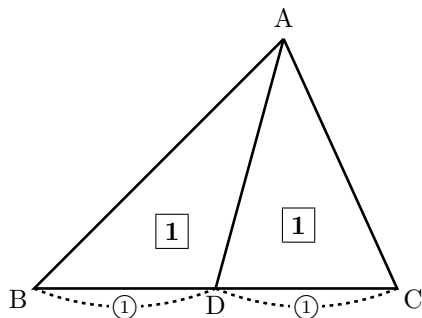
★ 図形の基本は三角形 (最重要格言)

$$BD : DC = a : b \Leftrightarrow \triangle ABD : \triangle ACD = a : b$$

高さが等しい三角形であるから、底辺比 = 面積比

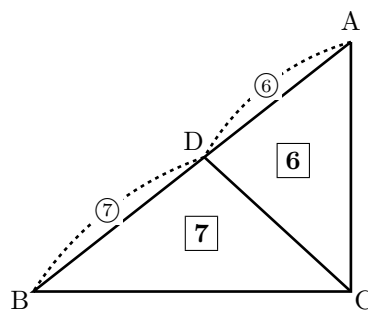
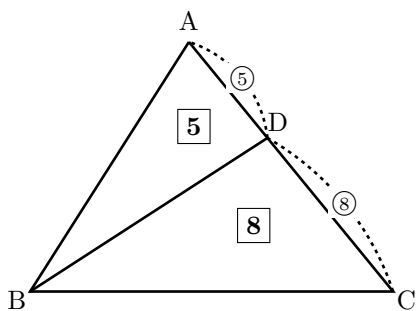
(1) $BD : DC = 1 : 1$

(2) $BD : DC = 2 : 5$



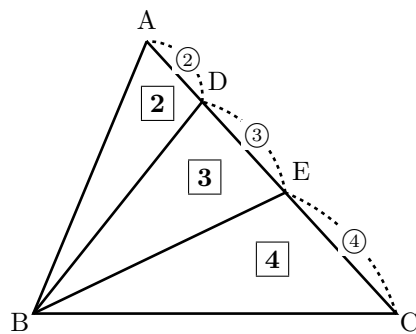
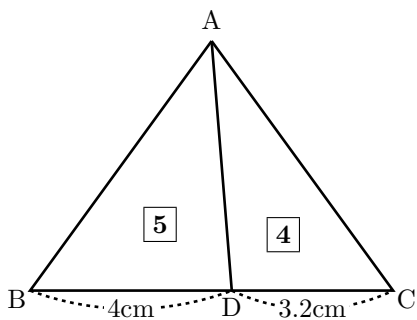
(3) $AD : DC = 5 : 8$

(4) $AD : DB = 6 : 7$



(5) $BD = 4\text{ cm}, DC = 3.2\text{ cm}$

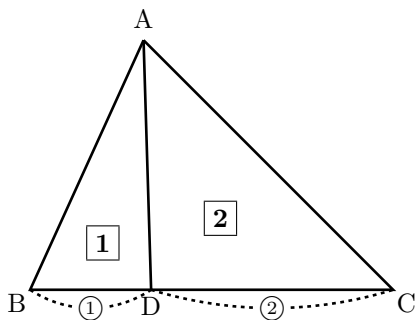
(6) $AD : DE : EC = 2 : 3 : 4$



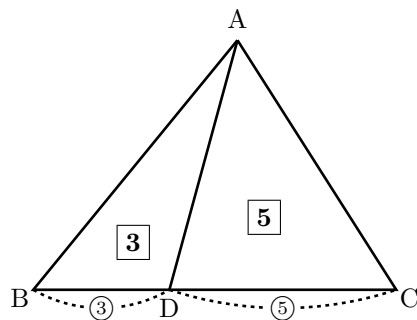
$$4 : 3.2 = 40 : 32 = 5 : 4$$

2. 下図の三角形の内部に面積比を書き込め。(S級 20秒, A級 28秒, B級 45秒, C級 1分10秒)

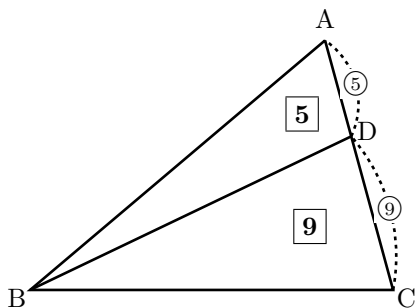
(1) $BD : DC = 1 : 2$



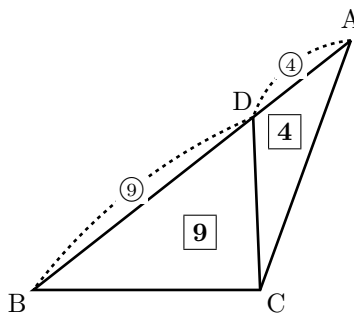
(2) $BD : DC = 3 : 5$



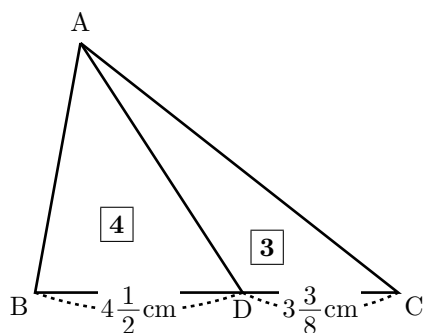
(3) $AD : DC = 5 : 9$



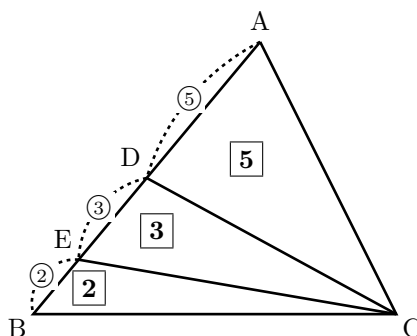
(4) $AD : DB = 4 : 9$



(5) $BD = 4\frac{1}{2} \text{ cm}, DC = 3\frac{3}{8} \text{ cm}$



(6) $AD : DE : EB = 5 : 3 : 2$



$$4\frac{1}{2} : 3\frac{3}{8} = \frac{9}{2} : \frac{27}{8} = (9 \times 8) : (27 \times 2) = 4 : 3$$