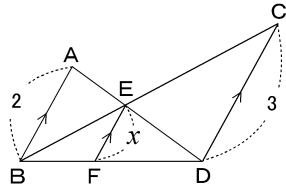


平行線と線分の比の応用

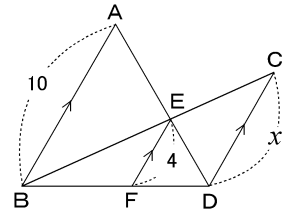
例題  $AB \parallel EF \parallel CD$  のとき、 $x$  の値を求めよ。

(1)



答

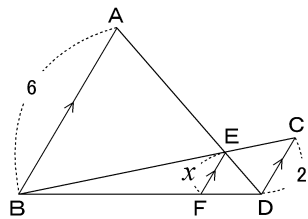
(2)



答

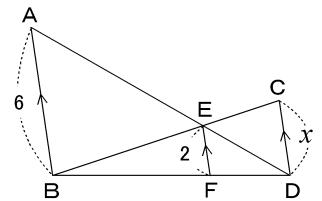
練習  $AB \parallel EF \parallel CD$  のとき、の値を求めよ。

(1)



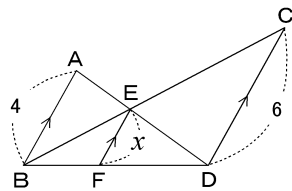
答

(3)



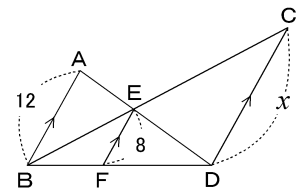
答

(2)



答

(4)



答

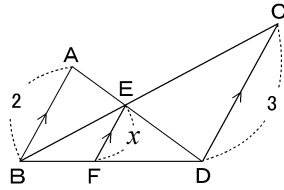
平行線と線分の比の応用

例題 AB//EF//CDのとき、xの値を求めよ。

(1)

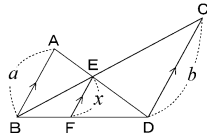
★  
△ABE∽△DCEより、

$$\begin{aligned} BE:EC &= 2:3 \\ BE:BC &= EF:CD \\ 2:5 &= x:3 \\ 5x &= 6 \\ x &= \frac{6}{5} \end{aligned}$$



※  
 $x = \frac{a \times b}{a+b}$  を利用する。

$$x = \frac{2 \times 3}{2+3} = \frac{6}{5}$$

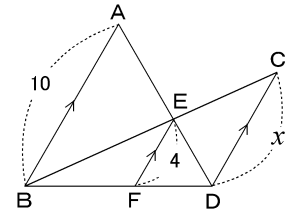


答  $x = \frac{6}{5}$

(2)

★  
DE:DA=EF:AB  
=4:10  
=2:5

△ABE∽△DCEより、  
10:x=3:2  
3x=20  
 $x = \frac{20}{3}$



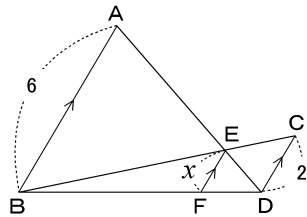
※  
 $4 = \frac{10 \times x}{10+x}$   
 $40 + 4x = 10x$   
 $6x = 40$   
 $x = \frac{40}{6} = \frac{20}{3}$

答  $x = \frac{20}{3}$

練習 AB//EF//CDのとき、の値を求めよ。

(1)

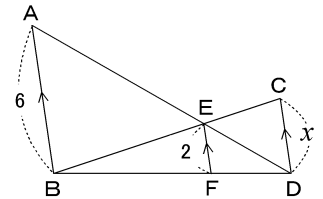
★  
 $x = \frac{6 \times 2}{6+2} = \frac{12}{8} = \frac{3}{2}$



答  $x = \frac{3}{2}$

(3)

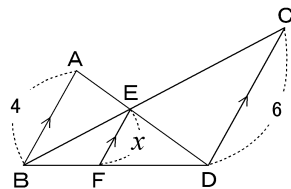
★  
 $2 = \frac{6 \times x}{6+x}$   
 $12 + 2x = 6x$   
 $4x = 12$   
 $x = 3$



答  $x = 3$

(2)

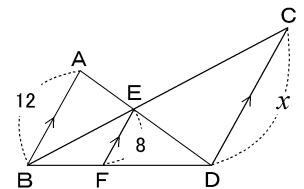
★  
 $x = \frac{4 \times 6}{4+6} = \frac{24}{10} = \frac{12}{5}$



答  $x = \frac{12}{5}$

(4)

★  
 $8 = \frac{12 \times x}{12+x}$   
 $96 + 8x = 12x$   
 $4x = 96$   
 $x = 24$



答  $x = 24$