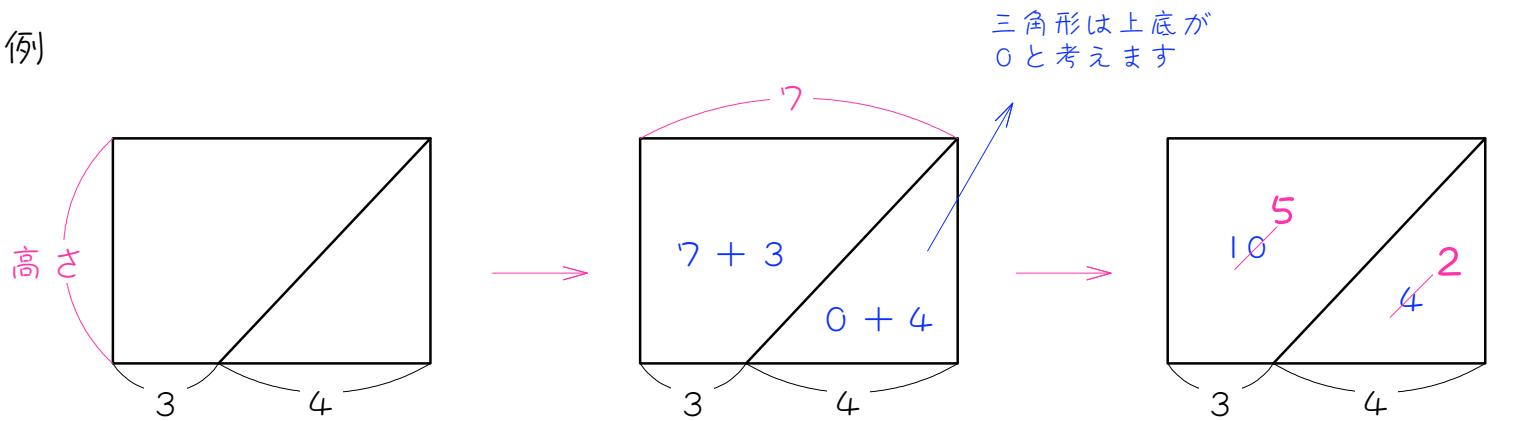


ステップ1 高さが等しいとき、面積の比 = 上底 + 下底の比

|

例にならって、各部分の面積比をかきこみなさい。※図形は全て長方形または平行四辺形です。

例

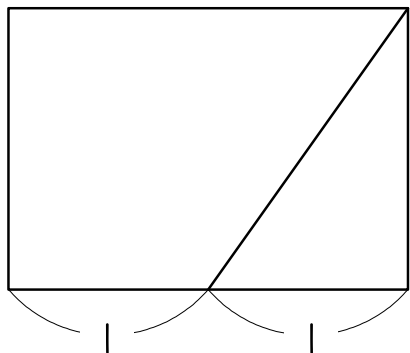


上の台形と三角形は高さが等しいから、

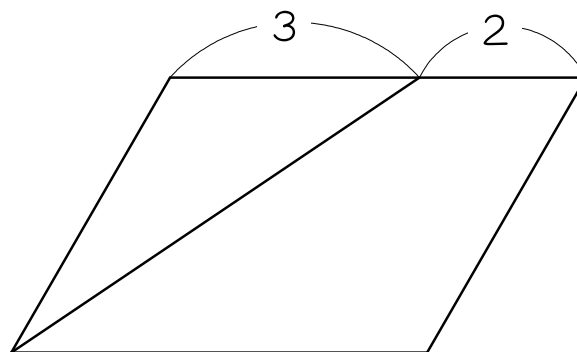
面積の比は、
 <上底 + 下底> の比
 で決まります。

$$\begin{aligned} & (7 + 3) : (0 + 4) \\ & = 10 : 4 \\ & = \underline{5 : 2} \end{aligned}$$

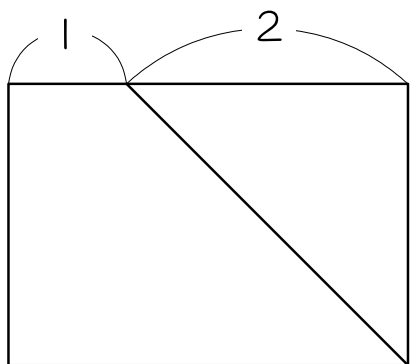
(1)



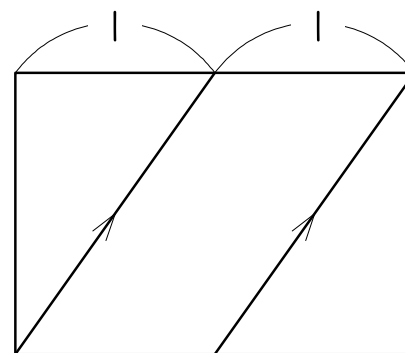
(2)



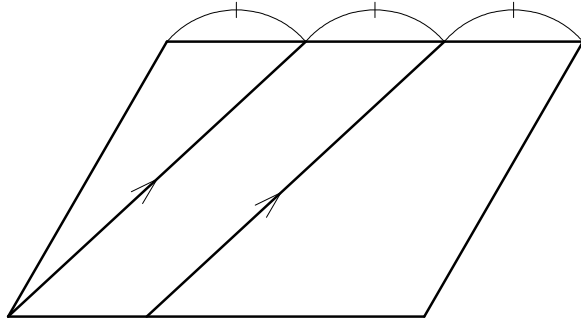
(3)



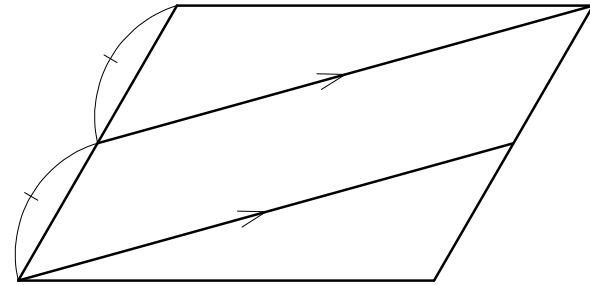
(4)



(5)

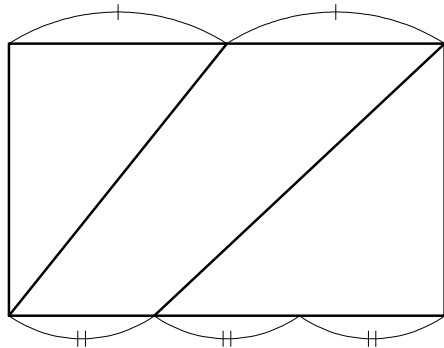


(6)

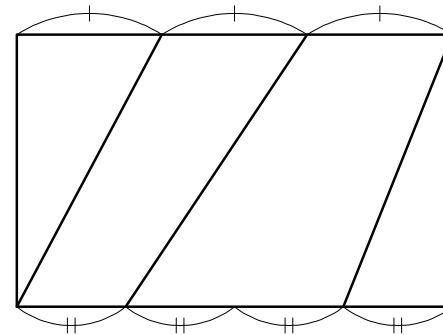


(7)☆

横の長さを2でも3でも割れる数にします。



(8)☆

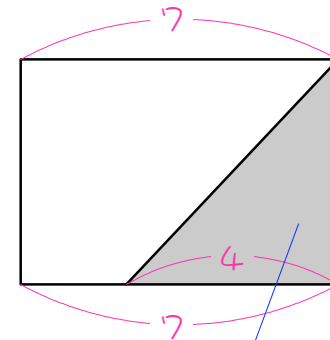
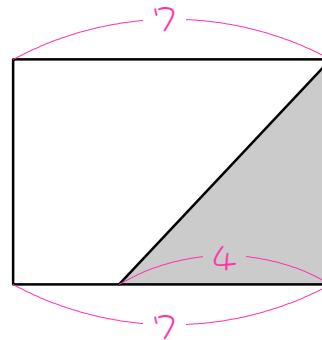
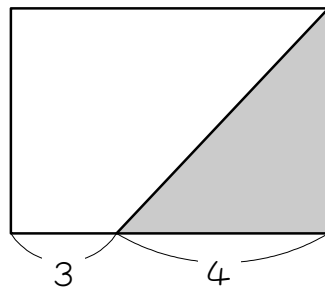


ステップ2 全体の何倍かを求める - 全体の上底 + 下底

2

色のついた部分の面積は全体の面積の何倍ですか。

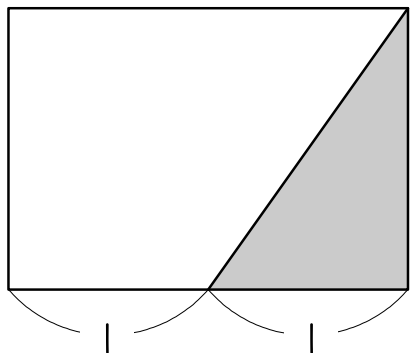
例



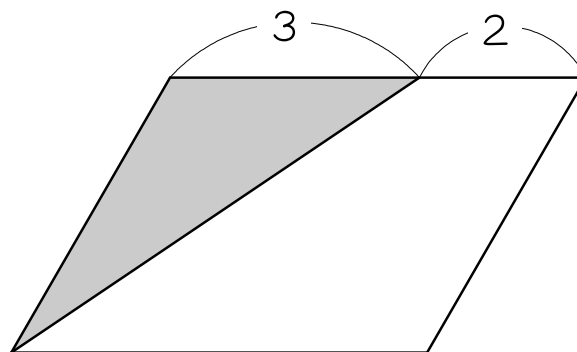
全体の上底 + 下底は
 $7 \times 2 = 14$
 そのうち4を使って
 いるから、

$$\frac{4}{14} = \frac{2}{7} \text{ (倍)}$$

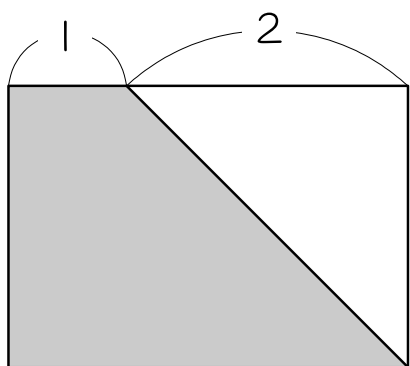
(1)



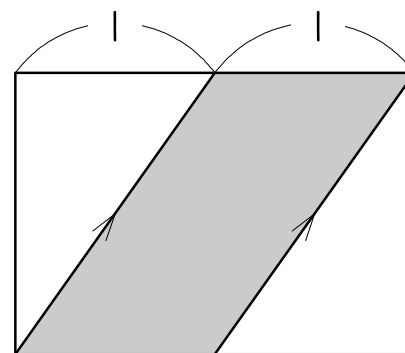
(2)



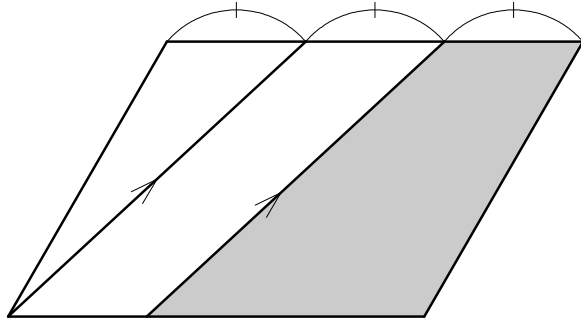
(3)



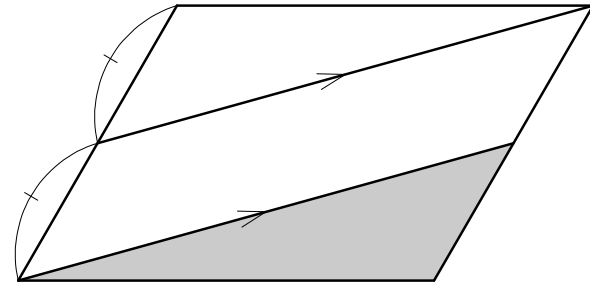
(4)



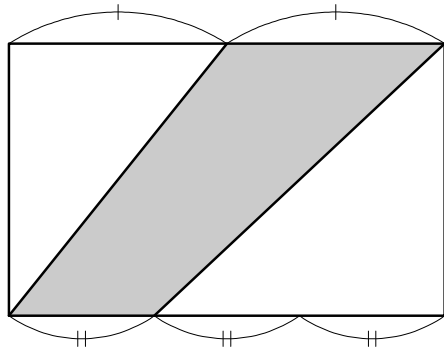
(5)



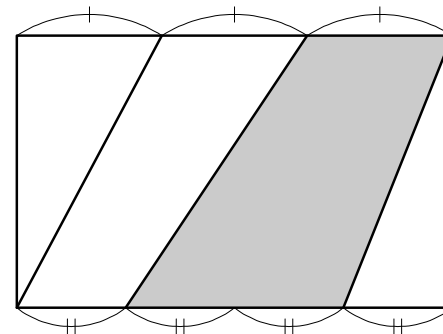
(6)



(7)



(8)

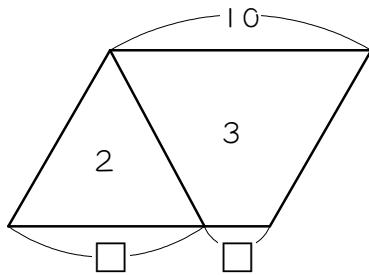


ステップ3 長さを求める(1) - 比例配分

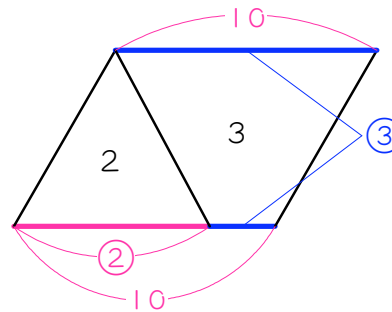
3

平行四辺形が図のような面積比で分かれているとき、□にあてはまる数を求めなさい。

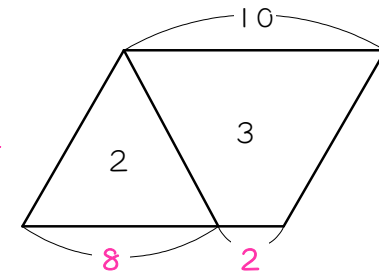
例



面積比が2 : 3 だ
から、上底 + 下底
の比も2 : 3

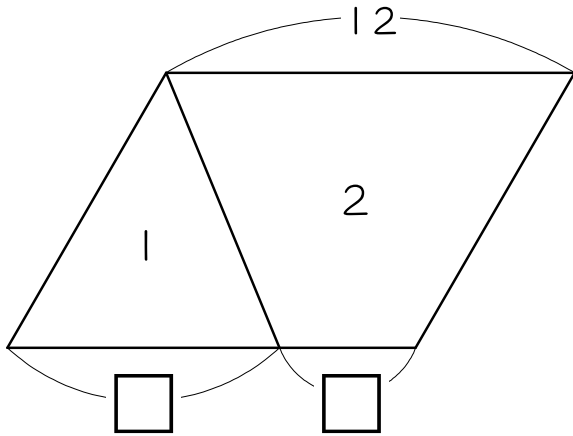


$$\begin{aligned} \textcircled{2} + \textcircled{3} &= \textcircled{5} & 10 \times 2 &= 20 \\ \textcircled{5} &= 20 \\ \textcircled{1} &= 4 \\ \textcircled{2} &= 8 \end{aligned}$$

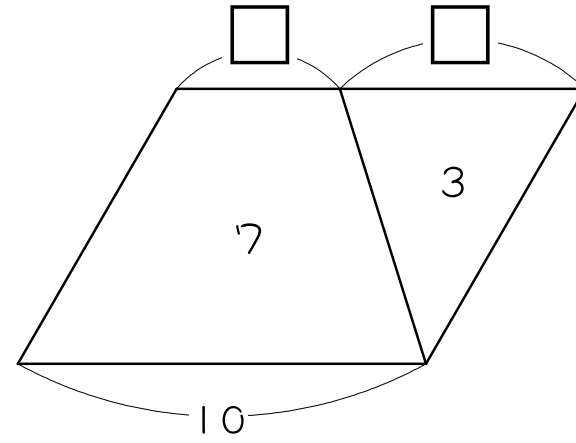


$$10 - 8 = 2 \quad \text{完成!}$$

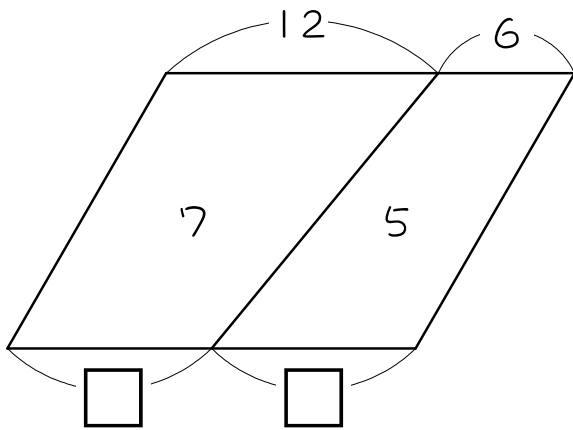
(1)



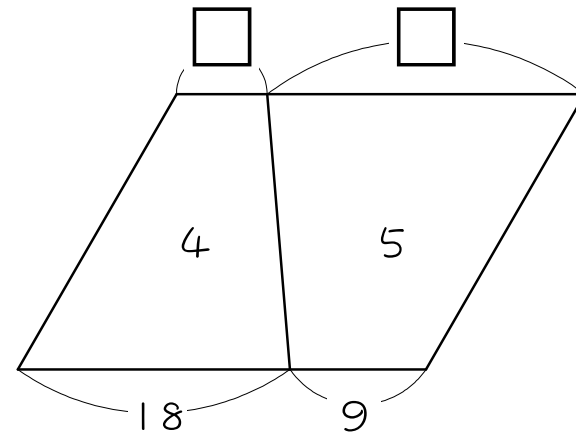
(2)



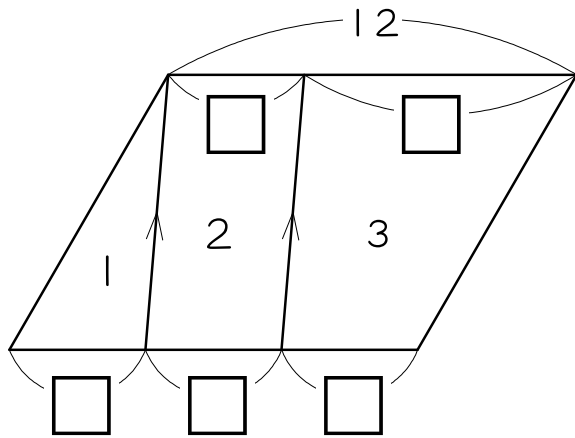
(3)



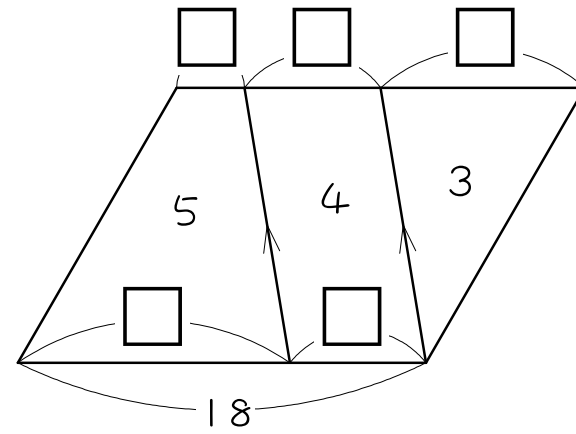
(4)



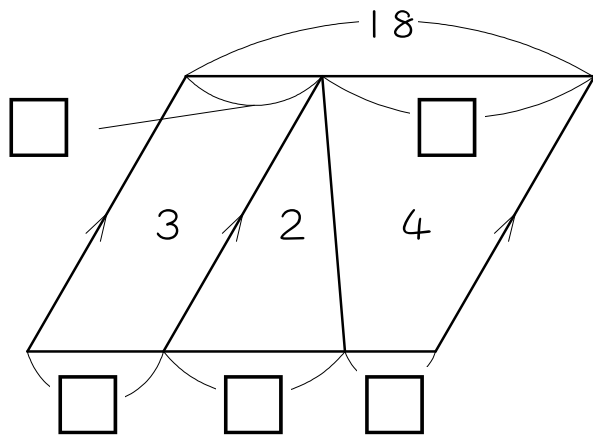
(5)



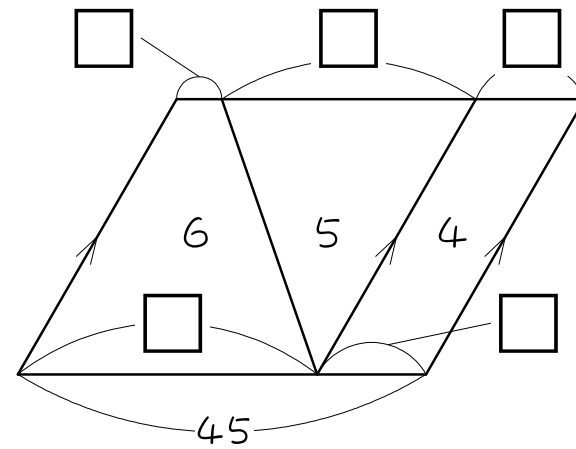
(6)



(7)



(8)

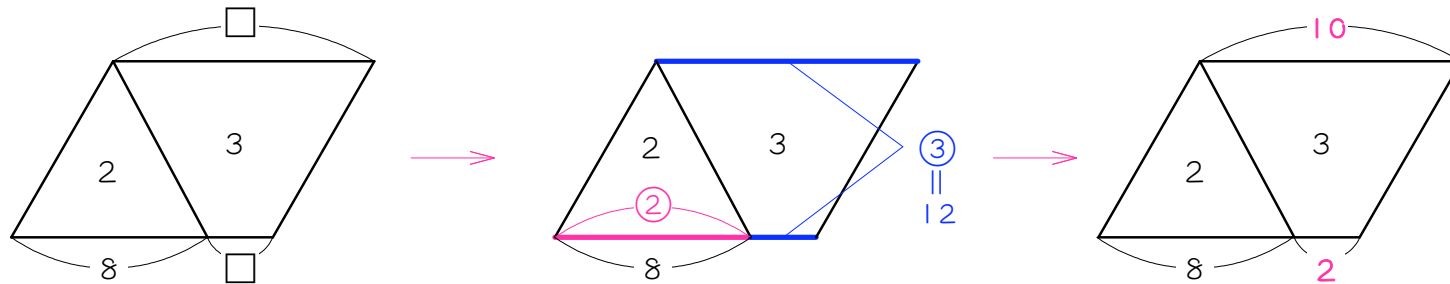


ステップ4 長さを求める(2) - 全体の上底 + 下底が分かる

4

平行四辺形が図のような面積比で分かれているとき、□にあてはまる数を求めなさい。

例



面積比が2 : 3だから、上底 + 下底の比も2 : 3

$$\textcircled{2} = 8 \text{ より、} \textcircled{3} = 12$$

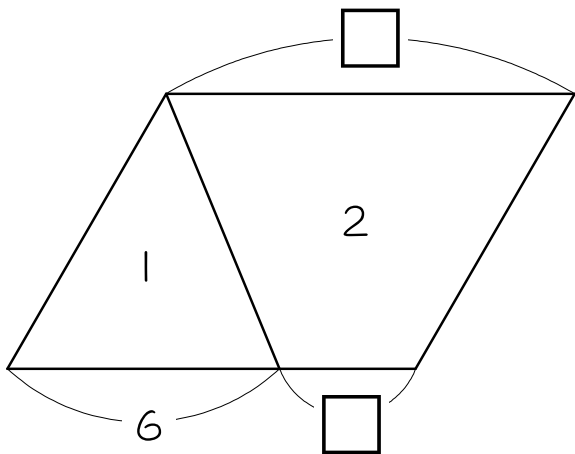
$$8 + 12 = 20$$

これが全体の上底 + 下底

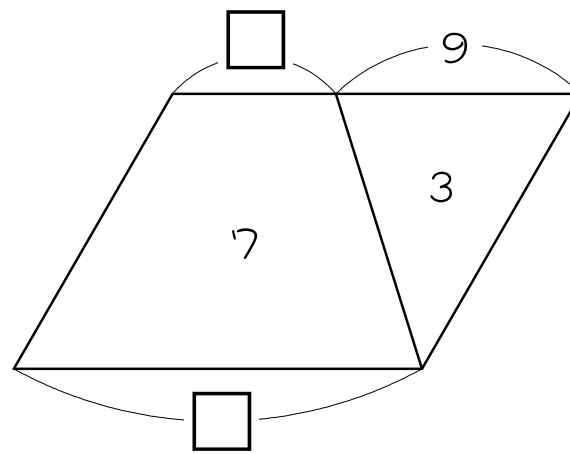
$$20 \div 2 = 10$$

$$10 - 8 = 2$$

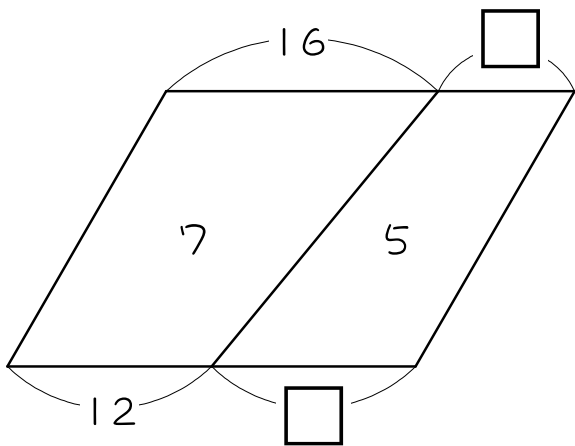
(1)



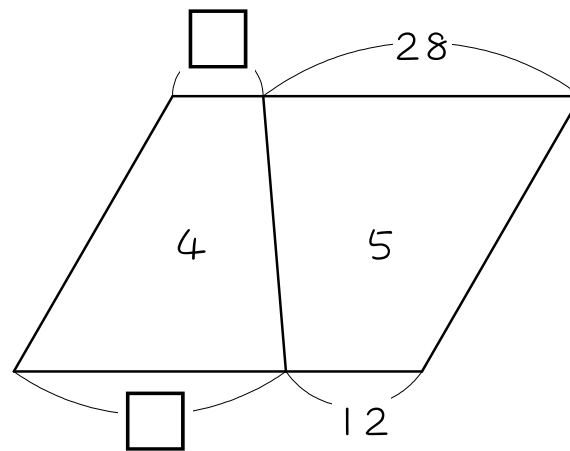
(2)



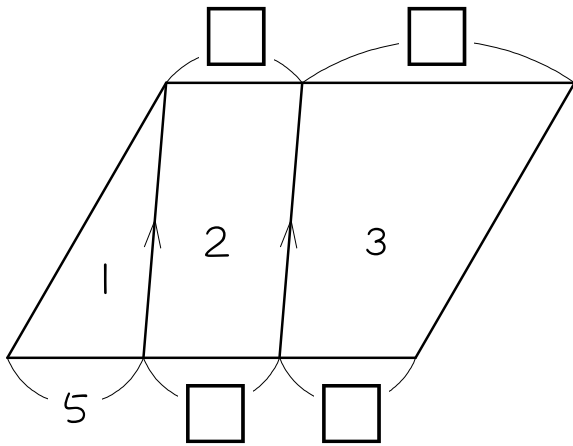
(3)



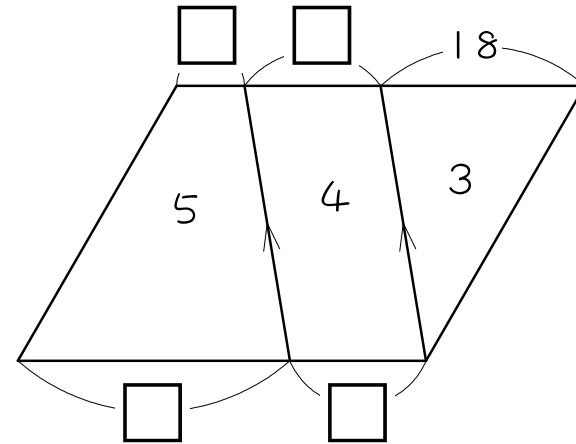
(4)



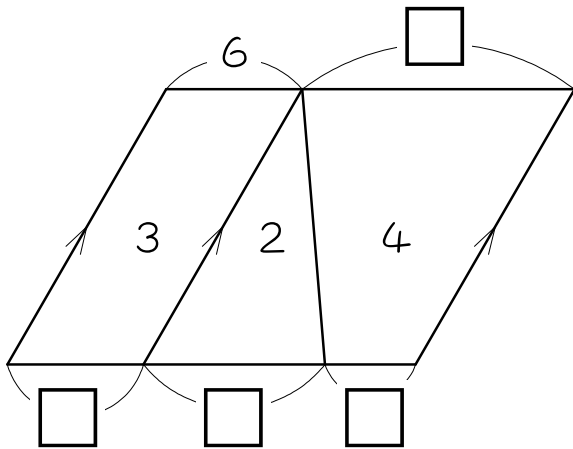
(5)



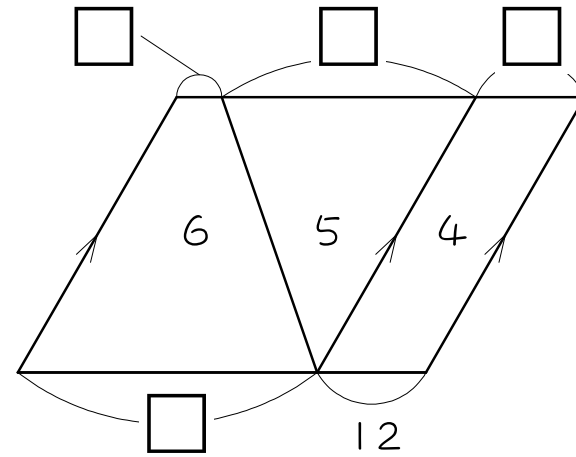
(6)



(7)

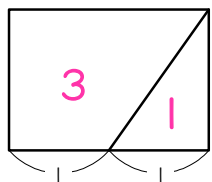


(8)

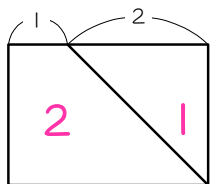


— 解答 —

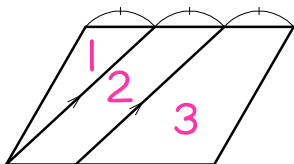
1 (1)



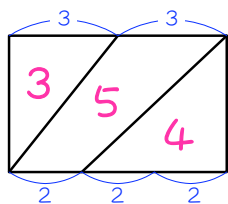
(3)



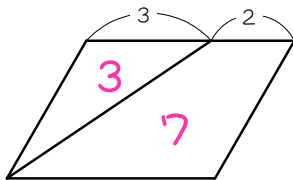
(5)



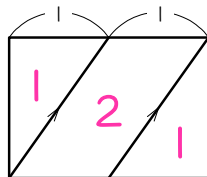
(7)



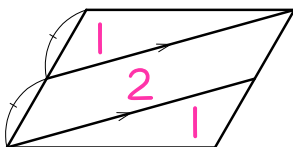
(2)



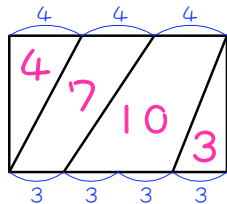
(4)



(6)



(8)



2

(1) $\frac{1}{4}$

(2) $\frac{3}{10}$

(3) $\frac{4}{6} = \frac{2}{3}$

(4) $\frac{2}{4} = \frac{1}{2}$

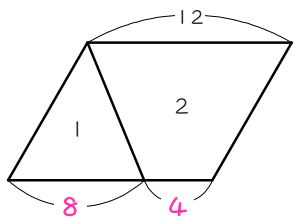
(5) $\frac{3}{6} = \frac{1}{2}$

(6) $\frac{1}{4}$

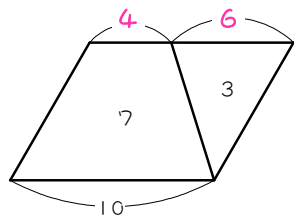
(7) $\frac{5}{12}$

(8) $\frac{10}{24} = \frac{5}{12}$

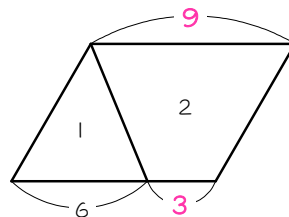
3 (1)



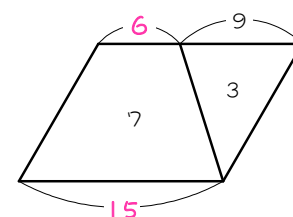
(2)



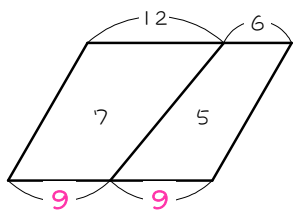
4 (1)



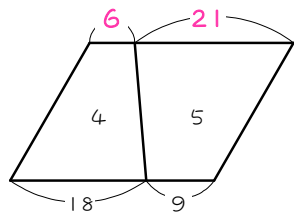
(2)



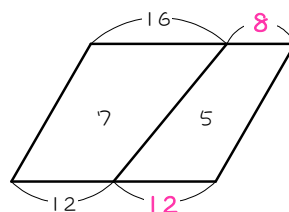
(3)



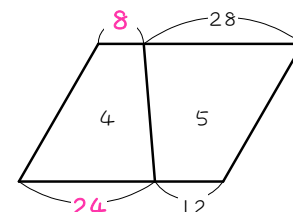
(4)



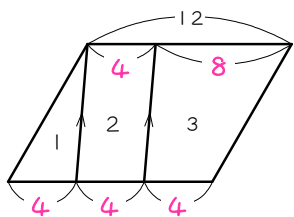
(3)



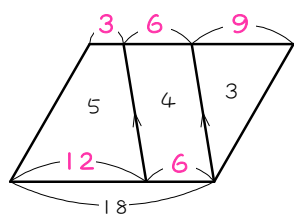
(4)



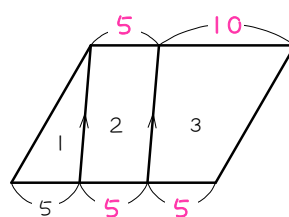
(5)



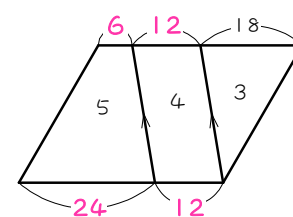
(6)



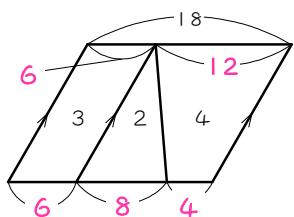
(5)



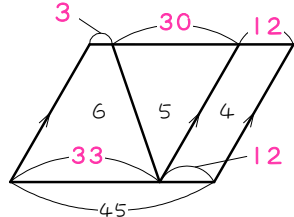
(6)



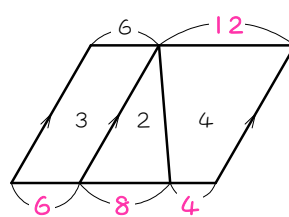
(7)



(8)



(7)



(8)

