

三平方の定理の基本1

NO 2

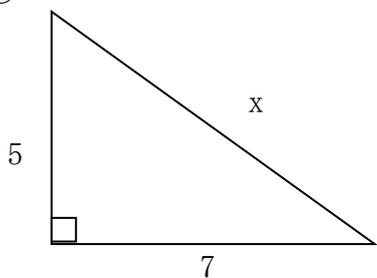
名前

/ 6 点

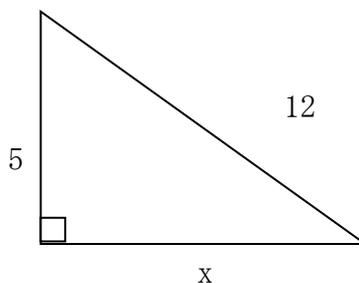


下の図の直角三角形で、 x を求めなさい。

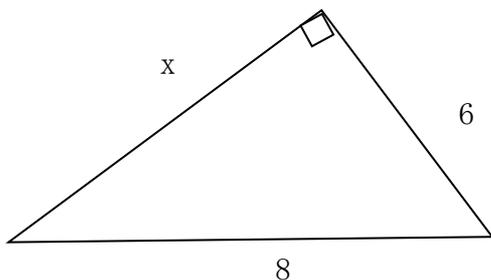
①



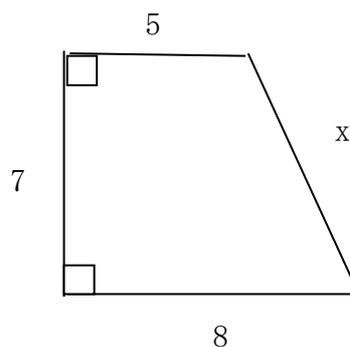
②



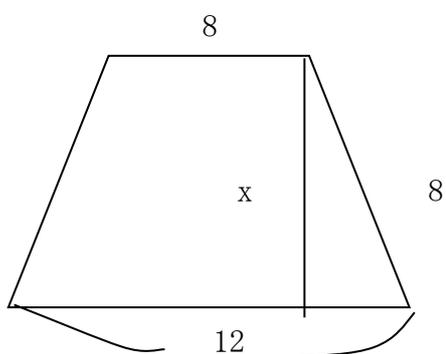
③



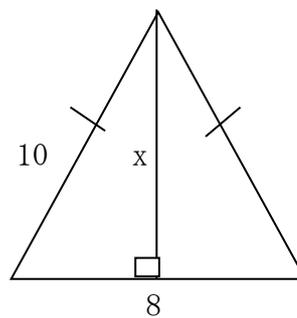
④



⑤



⑥



解答

$$\begin{aligned} \textcircled{1} \quad x^2 &= 5^2 + 7^2 \\ x^2 &= 74 \end{aligned}$$

$$\begin{aligned} x \text{ は正の数だから,} \\ x &= \sqrt{74} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 12^2 &= 5^2 + x^2 \\ x^2 &= 119 \end{aligned}$$

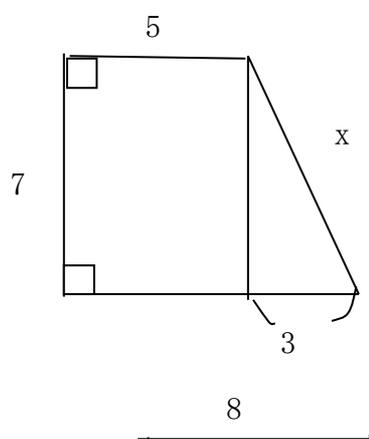
$$\begin{aligned} x \text{ は正の数だから,} \\ x &= \sqrt{119} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad 8^2 &= 6^2 + x^2 \\ x^2 &= 28 \end{aligned}$$

$$\begin{aligned} x \text{ は正の数だから,} \\ x &= \sqrt{28} \\ &= 2\sqrt{7} \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 &= 7^2 + 3^2 \\ x^2 &= 58 \end{aligned}$$

$$\begin{aligned} x \text{ は正の数だから,} \\ x &= \sqrt{58} \end{aligned}$$



$$\textcircled{5} \quad (12 - 8) \div 2 = 2$$