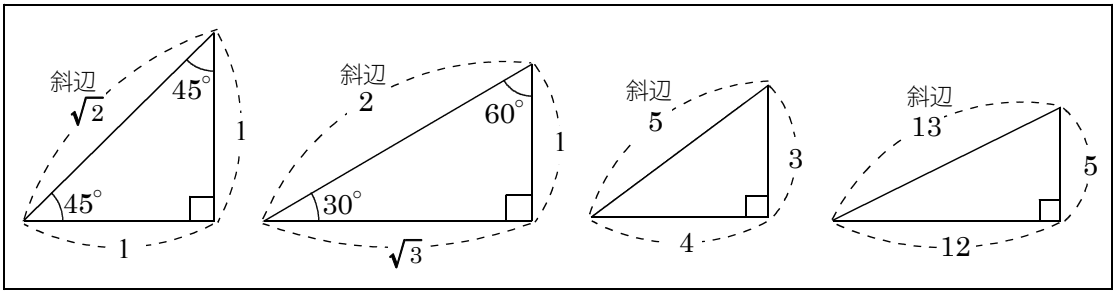
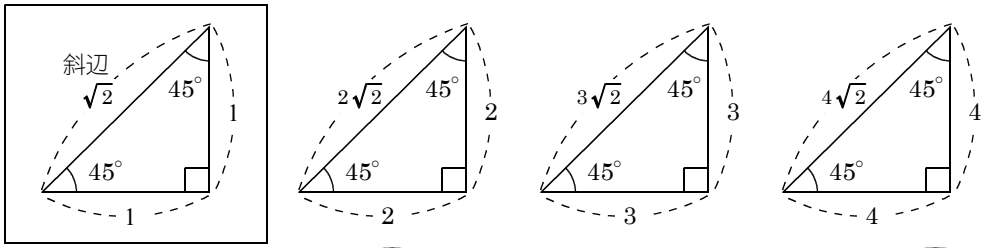
三平方NO3

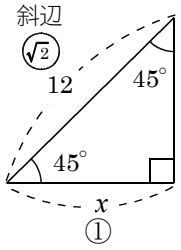
特別な直角三角形の3辺の比



直角二等辺三角形

一辺がわかったら他の２辺がすぐでるようにしておくこと！





$1 : \sqrt{2} = x : 12$

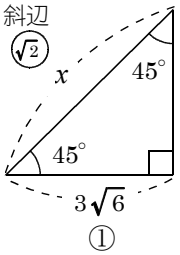
比　実際の長さ

$\sqrt{2}\,x = 12$

$\dfrac{\sqrt{2}\,x}{\sqrt{2}} = \dfrac{12}{\sqrt{2}}$

$x = 6\sqrt{2}$

分母の有理化



$1 : \sqrt{2} = 3\sqrt{6} : x$

比　実際の長さ

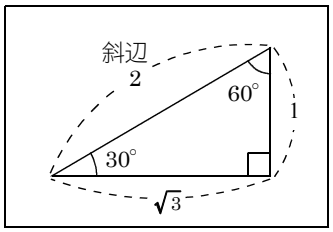
$x = 3\sqrt{12}$

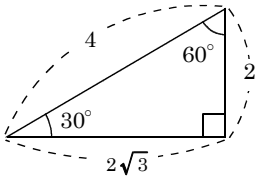
$x = 3 \times 2\sqrt{3}$

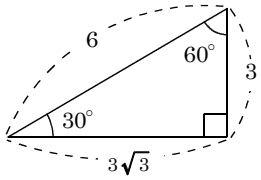
$x = 6\sqrt{3}$

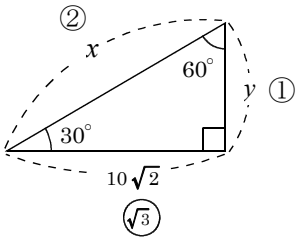
$$\frac{12}{\sqrt{2}} = \frac{12 \times \sqrt{2}}{\sqrt{2} \times \sqrt{2}} = \frac{12\sqrt{2}}{2} = 6\sqrt{2}$$

30° 60° 90° の直角三角形









xを求める

$2 : \sqrt{3} = x : 10\sqrt{2}$

比　実際の長さ

$\sqrt{3}\,x = 20\sqrt{2}$

$\dfrac{\sqrt{3}\,x}{\sqrt{3}} = \dfrac{20\sqrt{2}}{\sqrt{3}}$

$x = \dfrac{20\sqrt{6}}{3}$

分母の有理化

y を求める

$1 : \sqrt{3} = y : 10\sqrt{2}$

比　実際の長さ

$\sqrt{3}\,y = 10\sqrt{2}$

$\dfrac{\sqrt{3}\,y}{\sqrt{3}} = \dfrac{10\sqrt{2}}{\sqrt{3}}$

$y = \dfrac{10\sqrt{6}}{3}$

分母の有理化