

数学 練習問題(三角関数・逆三角関数) 5/18

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1. 次の方程式を解け。

$$(1) \sin \theta = \frac{1}{2} \quad -\frac{\pi}{2} \leq \theta \leq \frac{\pi}{2}$$

答 _____

$$(2) \cos \theta = \frac{1}{\sqrt{2}} \quad 0 \leq \theta \leq \pi$$

答 _____

$$(3) \tan \theta = 0 \quad -\frac{\pi}{2} < \theta < \frac{\pi}{2}$$

答 _____

$$(4) \sin \theta = -\frac{1}{2} \quad -\frac{\pi}{2} \leq \theta \leq \frac{\pi}{2}$$

答 _____

$$(5) \cos \theta = 1 \quad 0 \leq \theta \leq \pi$$

答 _____

$$(6) \cos \theta = \frac{\sqrt{3}}{2} \quad 0 \leq \theta \leq \pi$$

答 _____

$$(7) \sin \theta = 1 \quad -\frac{\pi}{2} \leq \theta \leq \frac{\pi}{2}$$

答 _____

$$(8) \tan \theta = -1 \quad -\frac{\pi}{2} < \theta < \frac{\pi}{2}$$

答 _____

$$(9) \cos \theta = -\frac{\sqrt{3}}{2} \quad 0 \leq \theta \leq \pi$$

答 _____

$$(10) \sin \theta = \frac{\sqrt{3}}{2} \quad -\frac{\pi}{2} \leq \theta \leq \frac{\pi}{2}$$

答 _____

2. 次の逆三角関数の値を求めよ。

(1) $\text{Sin}^{-1}\left(\frac{1}{\sqrt{2}}\right)$

答 _____

(2) $\text{Cos}^{-1}\left(-\frac{1}{\sqrt{2}}\right)$

答 _____

(3) $\text{Tan}^{-1}(-1)$

答 _____

(4) $\text{Sin}^{-1}\left(\frac{1}{2}\right)$

答 _____

(5) $\text{Cos}^{-1}\left(-\frac{\sqrt{3}}{2}\right)$

答 _____

(6) $\text{Tan}^{-1}\left(\frac{1}{\sqrt{3}}\right)$

答 _____