

1回目課題2

名前：

令和元年10月01日(火)

次の三角関数について、有理化した値を求めよ.

$$(1) \tan\left(\frac{\pi}{4}\right) =$$

$$(2) \tan\left(\frac{\pi}{2} - \frac{\pi}{6}\right) =$$

$$(3) \tan\left(\pi - \frac{\pi}{3}\right) =$$

$$(4) \tan\left(\pi + \frac{\pi}{4}\right) =$$

$$(5) \tan\left(\frac{\pi}{3} + 2n\pi\right) =$$

$$(6) \sin\left(\frac{\pi}{4} + \frac{\pi}{3}\right) =$$

$$(7) \sin\left(\frac{7\pi}{12}\right) =$$

$$(8) \cos\left(\frac{5\pi}{12}\right) =$$

$$(9) \frac{1}{2} \left\{ \sin\left(\frac{\pi}{4} + \frac{\pi}{3}\right) + \sin\left(\frac{\pi}{4} - \frac{\pi}{3}\right) \right\} =$$

$$(10) \frac{1}{2} \left\{ \sin\left(\frac{11\pi}{12}\right) + \sin\left(\frac{5\pi}{12}\right) \right\} =$$

$$(11) \frac{1}{2} \left\{ \sin\left(\frac{5\pi}{12}\right) - \sin\left(\frac{\pi}{12}\right) \right\} =$$

$$(12) \frac{1}{2} \left\{ \sin\left(\frac{7\pi}{12}\right) + \cos\left(\frac{\pi}{12}\right) \right\} =$$

$$(13) \frac{1}{2} \left\{ \cos \left(\frac{11\pi}{12} \right) + \cos \left(\frac{5\pi}{12} \right) \right\} =$$

$$(14) \frac{1}{2} \left\{ \cos \left(\frac{7\pi}{12} \right) - \cos \left(\frac{\pi}{12} \right) \right\} =$$

$$(15) \sin \left(\frac{\pi}{4} \right) \cos \left(\frac{\pi}{4} \right) =$$

$$(16) \sin \left(\frac{5\pi}{12} \right) =$$

$$(17) \cos \left(\frac{7\pi}{12} \right) =$$

$$(18) \sin \left(\frac{5\pi}{12} \right) + \sin \left(\frac{\pi}{12} \right) =$$

$$(19) \sin \left(\frac{11\pi}{12} \right) - \sin \left(\frac{5\pi}{12} \right) =$$

$$(20) \cos \left(\frac{5\pi}{12} \right) + \cos \left(\frac{\pi}{12} \right) =$$

$$(21) \cos \left(\frac{11\pi}{12} \right) - \cos \left(\frac{5\pi}{12} \right) =$$

$$(22) \sin^2 \left(\frac{\pi}{6} \right) + \cos^2 \left(\frac{\pi}{6} \right) =$$

$$(23) \pm \sqrt{\frac{1 - \cos \left(\frac{2\pi}{3} \right)}{2}} =$$

$$(24) \pm \sqrt{\frac{1 + \cos \left(\frac{\pi}{3} \right)}{2}} =$$

$$(25) \cos^2 \left(\frac{\pi}{8} \right) - \sin^2 \left(\frac{\pi}{8} \right) =$$