## Worksheet: Integrals of powers of $\sin$ and $\cos$

Compute these integrals with a group, if possible!

**A.** 
$$\int_{\pi/4}^{\pi/3} \cos^4 x \sin x \, dx =$$

$$\mathbf{B.} \quad \int \cos^3 x \sin^4 x \, dx =$$

$$\mathbf{C.} \quad \int \sin^2(4x) \, dx =$$

$$\mathbf{D.} \quad \int e^{\sin x} \cos^3 x \, dx =$$

$$\mathbf{E.} \quad \int \sin 2x \cos x \, dx =$$

## Worksheet: Various trigonometric integrals

Compute these integrals with a group, if possible!

$$\mathbf{A.} \quad \int \tan(4x) \, dx =$$

**B.** 
$$\int \sec^2 x \tan^3 x \, dx =$$

$$\mathbf{C.} \quad \int_0^\pi \sin(4x)\cos(3x)\,dx =$$

$$\mathbf{D.} \quad \int \tan^4 t \, dt =$$

$$\mathbf{E.} \quad \int \sec(2x) \, dx =$$