

Homework 2-Math 231 h

Due date Wednesday, September 6, Submission in pairs!, *-turn in.

- (1) Read 6.8 and 6.9
- (2) Read p=506 about $\int \tan^n(x) \sec^m(x) dx$?
- (3) * Is

$$\int_0^{\frac{\pi}{2}} \sec(x) dx$$

a finite number or ∞ . Justify your argument.

- (4) * Calculate

$$\int_1^2 \frac{1}{\sinh(u)} du$$

(Hint: $x = \cosh(u)$)

- (5) Read page 524 and calculate

$$\int_0^1 \frac{1}{\sqrt{1-x^2}} dx .$$

- (6) p=516 11, 13, 17, 18*
- (7) p=539 no 37 and 38*.