

## HOMWORK 6

due date: November 29, 2018

Find the following limits.

1.  $\lim_{x \rightarrow \frac{\pi}{2}} (\cos x + \sin x)$

2.  $\lim_{x \rightarrow 2} (x^5 + x^2 + \frac{1}{x-1})$

3.  $\lim_{x \rightarrow 0} \sqrt{1+x}$

4.  $\lim_{x \rightarrow 0} \frac{\sin 6x}{x}$

5.  $\lim_{x \rightarrow -1} \frac{x^4 + x^2 - 2}{x+1}$

6.  $\lim_{x \rightarrow 0} \frac{\sqrt{2+x} - \sqrt{2+x^2}}{x}$

(6 × 0.5 points)