

Homework # 32.

- Read pp. 178 - 189.

Do the following problems:

1. Let $h_n(x) = \frac{\cos(n^2 x)}{n}$

a) Show that $h_n(x)$ converges uniformly to some $h(x)$ on $\mathbb{R}$.

b) At what points does the sequence of derivatives h'_n converge?

2. Do # 6, 3.5, 4.1, 5.9, 6.4, 7.2, 8.4, 9.2.