

## Quiz 8.7 and 10.1

### Calculus 2

The improper integral  $\int_1^{\infty} \frac{1}{\sqrt{x^7}} dx$

Select one:

- a. converges to  $\frac{2}{5}$
- b. diverges.
- c. converges to 2
- d. converges to  $\frac{2}{3}$
- e. converges to  $\frac{2}{7}$



The correct answer is: converges to  $\frac{2}{5}$

The improper integral  $\int_0^3 \frac{1}{x-3} dx$

Select one:

- a. converges to  $-\frac{1}{3}$
- b. converges to  $\frac{1}{3}$
- c. diverges.
- d. converges to 0



The correct answer is: diverges.

The sequence  $a_n = \left(5 + \frac{5}{n}\right)^n$ .

Select one:

- a. diverges.
- b. converges to  $\ln 5$
- c. converges to 0
- d. converges to 5
- e. converges to  $e^5$



The correct answer is: diverges.

The sequence  $a_n = \left\{ \frac{1 - (-1)^n}{n} \right\}$ .

Select one:

- a. converges to 1
- b. converges to 0
- c. converges to  $-2$
- d. diverges.
- e. converges to 2



The correct answer is: converges to 0