

MATH3224 - Graded Homework 3 - Summer 1- 04 - Konaté

**Notice:** Show your work. A right answer with a bad reasoning will be considered as wrong.

**Responding right to each question is worth 20 points.**

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Graph the following function on the interval  $[-10,10] \subset \mathbf{R}$ . Precise the domain of each function. Use the graphs to determine the range of each function; say if it is onto; if its one-to-one.

$$f_1(x) = \frac{1}{x}; \quad f_2(x) = \frac{1}{x^2}$$

$$f_3(x) = \sin\left(\frac{1}{x}\right); \quad f_4(x) = \ln|x|.$$

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