Warning: The interactivity in this PDF file is enabled by Javascript. For full funcitonality you have to use the Javascript capable PDF browser. Currently only Adobe Reader is available.

RANGE OF A FUNCTION FROM ITS GRAPH

MATCHING GAME

The goal of the puzzle is to make correct pairs of questions and answers with a minimal amount of incorrect attempts.

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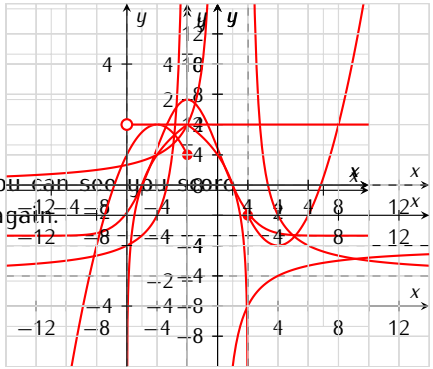
David Hilbert, German mathematician

Use the given graphs to determine the ranges of corresponding functions. Match every given function to its range. (Dashed lines represent asymptotes of functions.)

Graphs:



$$f_1(x) \equiv 2e^{-x^2+2x}$$

$$f_2(x) \equiv \begin{cases} \log_2(x+4)+1, & x \in (-\infty; -2] \\ \log_2(-x+2)+1, & x \in [0; 2) \end{cases}$$

$$f_3(x) \equiv \begin{cases} \frac{8}{x-2}, & x \in (0; \infty) \\ \frac{8}{x+2}, & x \in (-\infty; -2) \end{cases}$$

The puzzle is finished. You can see you score or browse the questions again.

Ranges:

a

b

c

d

e

f