

Matching Problem 1: In the colors of the visible light spectrum, the acronym ROYGBIV is often used.

Here is the list of questions:

- 1. R stands for
- 2. O stands for
- 3. G stands for
- 4. V stands for

Here is the (permuted list) of answers

- A. Orange
- B. Red
- C. Green
- D. Violet

This problem below is a matching problem using all three possible questions and corresponding answers.

Matching Problem 2: Match the functions to their derivatives

Here is the list of questions:

- 1. $\tan^{-1} x$
- 2. $\ln(\sqrt{1 + x^2})$
- 3. $\ln(1 + x^2)$

Here is the (permuted list) of answers

- A. $\frac{x}{1 + x^2}$
- B. $\frac{1}{1 + x^2}$
- C. $\frac{2x}{1 + x^2}$