

Circle the correct partial fraction decomposition.

(1) Partialled 1 into three

$$f(x) = \frac{1}{x^2 - 1}$$

(2) reflected over the x-axis

$$f(x) = -\frac{1}{(x^2 - 1)}$$

$$f(x) = -\frac{1}{x^2 - 1}$$

(3) vertically stretched by 1

$$f(x) = 2(x^2 - 1)$$

(4) vertically stretched by 2

$$f(x) = 2(x^2 - 1)$$

(5) horizontal stretch to the left

$$f(x) = \frac{1}{x^2 - 10}$$

(6) reflected over the y-axis

$$f(x) = \frac{1}{x^2 - 2x}$$

(7) vertically compressed by $\frac{1}{2}$

$$f(x) = \frac{1}{2}(x^2 - 1)$$

(8) vertically compressed by $\frac{1}{2}$

$$f(x) = \frac{1}{2}(x^2 - 1)$$

Circle the correct partial fraction decomposition for the function below.

(1) Partialled three into one and two terms

$$f(x) = 4 \log_2(x^2 - 2) = \frac{1}{2}$$

(2) reflected over the x-axis

$$f(x) = -4 \log_2(x^2)$$

(3) vertically stretched by 2

$$f(x) = 2 \log_2(x^2)$$

(4) vertically stretched by 2

$$f(x) = 4 \log_2(x^2)$$

(5) horizontally compressed by $\frac{1}{2}$

$$f(x) = 4 \log_2\left(\frac{1}{2}x^2\right)$$

(6) horizontal stretch to the left and 2 added

$$f(x) = 4 \log_2(x^2 + 2) = 5$$

(7) vertical stretch by 2

$$f(x) = 4 \log_2(x^2)$$

(8) vertically compressed by $\frac{1}{2}$

$$f(x) = \frac{1}{2} \log_2(x^2)$$

(9) horizontally compressed by $\frac{1}{2}$

$$f(x) = 4 \log_2\left(\frac{1}{2}x^2\right)$$

(10) horizontal stretch to the left and 2 added

$$f(x) = 4 \log_2(x^2 - 2) = \frac{1}{2}$$