

Horizontal Asymptotes

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Find all horizontal asymptotes of the given function, if any.

1) $h(x) = \frac{4x - 9}{x - 6}$ 1) _____

A) $y = 0$

C) $y = 6$

B) $y = 4$

D) no horizontal asymptotes

2) $h(x) = 7 - \frac{5}{x}$ 2) _____

A) $y = 7$

C) $x = 0$

B) $y = 5$

D) no horizontal asymptotes

3) $g(x) = \frac{x^2 + 7x - 2}{x - 2}$ 3) _____

A) $y = 1$

C) $y = 2$

B) $y = 0$

D) no horizontal asymptotes

4) $h(x) = \frac{6x^2 - 5x - 6}{4x^2 - 3x + 3}$ 4) _____

A) $y = 0$

C) $y = \frac{3}{2}$

B) $y = \frac{5}{3}$

D) no horizontal asymptotes

5) $h(x) = \frac{2x^4 - 4x^2 - 4}{3x^5 - 9x + 9}$ 5) _____

A) $y = 0$

C) $y = \frac{2}{3}$

B) $y = \frac{4}{9}$

D) no horizontal asymptotes

6) $R(x) = \frac{-3x^2 + 1}{x^2 + 4x - 12}$ 6) _____

A) $y = -6, y = 2$

C) $y = -3$

B) $y = 0$

D) no horizontal asymptotes

7) $f(x) = \frac{49x^4 + x^2 - 7}{x - x^3}$ 7) _____

A) $y = -49$

C) $y = -1, y = 1$

B) $y = 0$

D) no horizontal asymptotes

Answer Key

Testname: HORIZONTAL ASYMPTOTES

- 1) B
- 2) A
- 3) D
- 4) C
- 5) A
- 6) C
- 7) D