Task card 1 Rational Functions: Asymptotes & H...

Find the vertical asymptotes of $f(x) = \frac{-6x + 6}{x^2 + 11x + 28}$. Write them as x = a or x = b.

Task card 2 Rational Functions: Asymptotes & H...

Find the horizontal asymptote of $f(x) = \frac{-x - 3}{3x + 4}$.

Task card 3 Rational Functions: Asymptotes & H...

Find the hole in the graph of $f(x) = \frac{x^2 - 6x + 5}{x^2 - 1}$. Write it as a point (x, y).

Task card 4 Rational Functions: Asymptotes & H...

Find the horizontal asymptote of $f(x) = \frac{-3x + 5}{x^2 + 4x - 5}$. If there is none, write none.

Task card 5 Rational Functions: Asymptotes & H...

Find the vertical asymptotes of $f(x) = \frac{-6x + 6}{x^2 - 10x + 24}$. Write them as x = a or x = b.

Task card 6 Rational Functions: Asymptotes & H...

Find the hole in the graph of $f(x) = \frac{x^2 - 8x + 12}{x^2 - 11x + 30}$. Write it as a point (x, y).

Task card 7 Rational Functions: Asymptotes & H...

Find the horizontal asymptote of $f(x) = \frac{3x^2 - 5x - 4}{x + 1}$. If there is none, write none.

Task card 8 Rational Functions: Asymptotes & H...

Find the vertical asymptotes of $f(x) = \frac{-6x + 2}{x^2 - 2x - 35}$. Write them as $x = a$ or $x = b$.

Task card 9 Rational Functions: Asymptotes & H...

Find the hole in the graph of $f(x) = \frac{x^2 - 4x - 5}{x^2 - 11x + 30}$. Write it as a point (x, y).

Task card 10 Rational Functions: Asymptotes & H...

Find the horizontal asymptote of $f(x) = \frac{-2x - 5}{-3x - 1}$.

Task card 11 Rational Functions: Asymptotes & H...

Find the hole in the graph of $f(x) = \frac{x^2 - 4x}{x^2 - x}$. Write it as a point (x, y).

Task card 12 Rational Functions: Asymptotes & H...

Find the horizontal asymptote of $f(x) = \frac{6x^2 - 7x + 1}{x + 5}$. If there is none, write none.

Task card 13 Rational Functions: Asymptotes & H...

Find the vertical asymptotes of $f(x) = \frac{-x}{x^2 - 4x - 21}$. Write them as $x = a$ or $x = b$.

Task card 14 Rational Functions: Asymptotes & H...

Find the horizontal asymptote of $f(x) = \frac{-5x + 1}{x^2 + 7x - 5}$. If there is none, write none.

Task card 15 Rational Functions: Asymptotes & H...

Find the vertical asymptotes of $f(x) = \frac{-3x + 3}{x^2 + 3x - 28}$. Write them as $x = a$ or $x = b$.

Task card 16 Rational Functions: Asymptotes & H...

Find the hole in the graph of $f(x) = \frac{x^2 + 2x - 8}{x^2 - 6x + 8}$. Write it as a point (x, y).

Task card 17 Rational Functions: Asymptotes & H...

Find the horizontal asymptote of $f(x) = \frac{x - 7}{-4x + 8}$.

Task card 18 Rational Functions: Asymptotes & H...

Find the hole in the graph of $f(x) = \frac{x^2 + 8x + 15}{x^2 + 7x + 12}$. Write it as a point (x, y).

Task card 19 Rational Functions: Asymptotes & H...

Find the horizontal asymptote of $f(x) = \frac{2x^2 - 4x + 3}{x}$. If there is none, write none.

Task card 20 Rational Functions: Asymptotes & H...

Find the vertical asymptotes of $f(x) = \frac{6x - 8}{x^2 + 3x - 28}$. Write them as $x = a$ or $x = b$.

Task card 21 Rational Functions: Asymptotes & H...

Find the horizontal asymptote of $f(x) = \frac{-5x + 2}{x^2 - 2x + 1}$. If there is none, write none.

Task card 22 Rational Functions: Asymptotes & H...

Find the vertical asymptotes of $f(x) = \frac{5x + 8}{x^2 - 4x + 3}$. Write them as $x = a$ or $x = b$.

Task card 23 Rational Functions: Asymptotes & H...

Find the horizontal asymptote of $f(x) = \frac{2x + 2}{-2x - 5}$.

Task card 24 Rational Functions: Asymptotes & H...

Find the hole in the graph of $f(x) = \frac{x^2 + 8x + 12}{x^2 + 2x}$. Write it as a point (x, y).

Rational Functions: Asymptotes & Holes Task Cards

Recording sheet · Grade 11 · Answer each question about the rational function.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Rational Functions: Asymptotes & Holes Task Cards: Answer Key

Grade 11 · Medium

The answers online

1. x = -4 or x = -7	**2.** $y = -\frac{1}{3}$	**3.** (1, -2)
4. y = 0	**5.** x = 6 or x = 4	**6.** (6, 4)
7. none	**8.** x = 7 or x = -5	**9.** (5, -6)
10. $y = \frac{2}{3}$	**11.** (0, 4)	**12.** none
13. x = 7 or x = -3	**14.** y = 0	**15.** x = 4 or x = -7
16. (2, -3)	**17.** $y = -\frac{1}{4}$	**18.** (-3, 2)
19. none	**20.** x = 4 or x = -7	**21.** y = 0
22. x = 3 or x = 1	**23.** y = -1	**24.** (-2, -2)