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

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

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

Find the hole in the graph of $f(x) = \frac{x^2 + 5x - 24}{x^2 - 5x + 6}$. Write it as a point (x, y).

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

Find the horizontal asymptote of $f(x) = \frac{2x - 2}{-4x - 7}$.

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

Find the hole in the graph of $f(x) = \frac{x^2 + 8x + 7}{x^2 - 4x - 5}$. Write it as a point (x, y).

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

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

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

Find the vertical asymptotes of $f(x) = \frac{2x - 5}{x^2 - 2x - 24}$. Write them as x = a or x = b.

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

Find the horizontal asymptote of $f(x) = \frac{6x - 5}{x^2 - 7x + 3}$. If there is none, write none.

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

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

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

Find the hole in the graph of $f(x) = \frac{x^2 - 36}{x^2 + 6x}$. Write it as a point (x, y).

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

Find the horizontal asymptote of $f(x) = \frac{6x - 3}{2x + 7}$.

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

Find the hole in the graph of $f(x) = \frac{x^2 + 2x - 8}{x^2 + 9x + 20}$. Write it as a point (x, y).

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

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

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

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

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

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

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

Find the vertical asymptotes of $f(x) = \frac{x - 1}{x^2 - 9x + 20}$. Write them as $x = a$ or $x = b$.

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

Find the hole in the graph of $f(x) = \frac{x^2 - 4x - 5}{x^2 + 8x + 7}$. Write it as a point (x, y).

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

Find the horizontal asymptote of $f(x) = \frac{-6x - 5}{-3x - 6}$.

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

Find the hole in the graph of $f(x) = \frac{x^2 + 4x - 5}{x^2 - 8x + 7}$. Write it as a point (x, y).

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

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

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

Find the vertical asymptotes of $f(x) = \frac{x - 9}{x^2 - 3x - 28}$. Write them as $x = a$ or $x = b$.

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

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

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

Find the vertical asymptotes of $f(x) = \frac{-4x + 6}{x^2 - 8x + 12}$. Write them as $x = a$ or $x = b$.

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

Find the hole in the graph of $f(x) = \frac{x^2 + x - 6}{x^2 + 7x + 12}$. Write it as a point (x, y).

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

Find the horizontal asymptote of $\frac{2x + 5}{-3x}$.

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 · Hard

The answers online

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