Task card 1 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to 2} \frac{x^3 - 8}{x - 2}$$

Task card 2 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to 81} \frac{\sqrt{x} - 9}{x - 81}$$

Task card 3 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to -5} \frac{2x^2 + 7x - 15}{x^2 + 4x - 5}$$

Task card 4 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to \infty} \frac{3x^2 - 5x - 5}{6x^2 - 4}$$

Task card 5 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to 3} \frac{x^2 - 3x}{x - 3}$$

Task card 6 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to 9} \frac{\sqrt{x} - 3}{x - 9}$$

Task card 7 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to -7} \frac{x^2 + 3x - 28}{x + 7}$$

Task card 8 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to 1} \frac{3x^2 + 3x - 6}{x^2 + 3x - 4}$$

Task card 9 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to -4} \frac{x^3 + 64}{x + 4}$$

Task card 10 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to 25} \frac{\sqrt{x} - 5}{x - 25}$$

Task card 11 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to -2} \frac{2x^2 + 7x + 6}{x^2 + 3x + 2}$$

Task card 12 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to \infty} \frac{-7x^3 - 9x^2 - 8}{x^3 - 2}$$

Task card 13 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to 7} \frac{x^2 - 5x - 14}{x - 7}$$

Task card 14 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to 4} \frac{\sqrt{x} - 2}{x - 4}$$

Task card 15 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to -4} \frac{2x^2 + 9x + 4}{x^2 + 2x - 8}$$

Task card 16 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to 16} \frac{\sqrt{x} - 4}{x - 16}$$

Task card 17 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to -2} \frac{x^3 + 8}{x + 2}$$

Task card 18 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to 36} \frac{\sqrt{x} - 6}{x - 36}$$

Task card 19 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to 4} \frac{3x^2 - 18x + 24}{x^2 - 5x + 4}$$

Task card 20 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to \infty} \frac{6x^2 + 8x}{4x^2 - 3}$$

Task card 21 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to -5} \frac{x^2 + 8x + 15}{x + 5}$$

Task card 22 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to \infty} \frac{9x^3 - 2x^2 + 1}{5x^3 + 3}$$

Task card 23 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to 5} \frac{x^2 - 7x + 10}{x^2 - 11x + 30}$$

Task card 24 Limits: Factoring & Limits at Infi...

Find the limit:

$$\lim_{x \to -4} \frac{x^2 + 10x + 24}{x^2 + 4x}$$

Limits: Factoring & Limits at Infinity Task Cards

Recording sheet · Grade 12 · Evaluate each limit. Give fractions in simplest form.

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

Limits: Factoring & Limits at Infinity Task Cards: Answer Key

Grade 12 · Hard

The answers online

1. 12	**2.** $\frac{1}{18}$	**3.** $\frac{13}{6}$
4. $\frac{1}{2}$	**5.** 3	**6.** $\frac{1}{6}$
7. -11	**8.** $\frac{9}{5}$	**9.** 48
10. $\frac{1}{10}$	**11.** 1	**12.** -7
13. 9	**14.** $\frac{1}{4}$	**15.** $\frac{7}{6}$
16. $\frac{1}{8}$	**17.** 12	**18.** $\frac{1}{12}$
19. 2	**20.** $\frac{3}{2}$	**21.** -2
22. $\frac{9}{5}$	**23.** -3	**24.** $\frac{1}{-2}$