



Check for extraneous solutions

- 1** What set describes the domain of this function?

$$f(x) = \frac{1x + 1}{1x - 4}$$

A $\{X \in \mathbb{R} | X < 4 \text{ or } 4 < X\}$

B $\{X \in \mathbb{R} | -4 < X < 4 \text{ or } -4 < X < 4\}$

- 2** Is this potential solution extraneous?

$$\frac{x^2 + x - 12}{x + 4} = 1$$

Potential solution: $x = -4$

A No

B Yes

- 3** One of these potential solutions is extraneous. Select the extraneous solution.

$$\frac{x^2 - 6x + 5}{x - 5} = -3$$

Potential solutions: $x = -2$, $x = 5$

A $x = -2$

B $x = 5$

- 4** One of these potential solutions is extraneous. Select the extraneous solution.

$$\frac{x^2 - 3x - 4}{x - 4} = -3$$

Potential solutions: $x = -4$, $x = 4$

A $x = 4$

B $x = -4$

- 5** One of these potential solutions is extraneous. Select the extraneous solution.

$$\frac{x^2 - 9x + 20}{x - 5} = -3$$

Potential solutions: $x = 1$, $x = 5$

A $x = 5$

B $x = 1$

- 6** One of these potential solutions is extraneous. Select the extraneous solution.

$$\frac{x^2 - 3x}{x - 3} = 4$$

Potential solutions: $x = 3$, $x = 4$

A $x = 3$

B $x = 4$

- 7** One of these potential solutions is extraneous. Select the extraneous solution.

$$\frac{x^2 + 9x + 14}{x + 2} = 3$$

Potential solutions: $x = -4$, $x = -2$

A $x = -4$

B $x = -2$

- 8** One of these potential solutions is extraneous. Select the extraneous solution.

$$\frac{x^2 - 1}{x + 1} = 2$$

Potential solutions: $x = -1$, $x = 3$

A $x = 3$

B $x = -1$



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One of these potential solutions is extraneous. Select the extraneous solution.

$$\frac{x^2 - 25}{x + 5} = -2$$

Potential solutions: $x = -5$, $x = 3$

A $x = 3$

B $x = -5$

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One of these potential solutions is extraneous. Select the extraneous solution.

$$\frac{x^2 + 4x + 4}{x + 2} = 2$$

Potential solutions: $x = -2$, $x = 0$

A $x = 0$

B $x = -2$

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One of these potential solutions is extraneous. Select the extraneous solution.

$$\frac{x^2 + x - 2}{x - 1} = -3$$

Potential solutions: $x = -5$, $x = 1$

A $x = -5$

B $x = 1$

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One of these potential solutions is extraneous. Select the extraneous solution.

$$\frac{x^2 + 3x + 2}{x + 2} = -4$$

Potential solutions: $x = -5$, $x = -2$

A $x = -5$

B $x = -2$