

Quiz 131

Simplify. State any excluded values.

1.
$$\frac{x^3 + 3x^2 - 10x}{x^3 + 5x^2 - 4x - 20}$$

2.
$$\frac{x^2 - 4x - 12}{3x + 4} \div \frac{x + 2}{3x^2 + 4x}$$

3.
$$\frac{x^2 - 11}{x^2 - 3x - 10} - \frac{2}{x - 5}$$

Solve. Check for extraneous solutions.

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

5. Machine A can do a certain job in 9 hours. Machine B can do the same job in 6 hours. How long will it take to do the job if both machines are used?