Solve each rational equation. Don’t forget about restrictions!

1. \[ x + \frac{4}{x} = -5 \]

2. \[ \frac{5}{x} + \frac{x}{x-1} = \frac{1}{x^2 - x} \]

3. \[ \frac{7}{a-5} - \frac{6}{a+3} = \frac{48}{a^2 - 2a - 15} \]

4. Solve the proportion: \[ \frac{-6}{x+1} = \frac{2}{x-3} \]

5. Solve for \( h \): \[ A = \frac{bh}{2} \]
6. Five times the reciprocal of a number equals the quotient of three and the sum of the number and two. Find the number.

7. Mr. Dodson can paint his house by himself in 4 days. His son needs an additional day to complete the job if he works by himself. If they work together, find how long it takes to paint the house.

8. Bob drove 200 miles in the same amount of time that it took a propeller plane to fly 1100 miles. The speed of the plane was 180 mph faster than the speed of the car. Find the speed of the car and the speed of the plane.