Solving: *Rational Equations*

Solve the equation.

(Hint: Don't forget to check if your results give you a zero in the denominator.)

1. $\frac{4}{x-2}=1-\frac{3}{x+1}$

2. $\frac{y+6}{y-4}+\frac{2y+3}{y-3}=\frac{y+6}{y-3}$

3. $\frac{3}{x+2}=\frac{4}{x-1}$

4. $\frac{x}{x+2}-\frac{3}{x+4}=\frac{x^2-3x+5}{x^2+6x+8}$

5. $\frac{4}{x+3}-\frac{5}{x-2}=\frac{x^2+3x-35}{x^2+x-6}$

6. $\frac{4}{x-2}=\frac{5}{x-3}$

7. $\frac{x}{x-4}+\frac{3}{x-5}=\frac{2x^2-12x+9}{x^2-9x+20}$

8. $\frac{x^2-3x+7}{x^2-9x+18}=\frac{x}{x-6}-\frac{4}{x-3}$

ANSWERS:

1. $x=0,8$
2. $y=-1$
3. $x=-11$
4. $x=\frac{3}{4}$
5. $x=-6$
6. $x=-2$
7. $x=3,7$
8. $x=4\frac{1}{4}$