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Write the partial fraction decomposition of each rational expression

1. 
$$\frac{2s-1}{(s+1)(s-2)}$$

2. 
$$\frac{2s-2}{(s-4)(s+2)}$$

3. 
$$\frac{7s^2 + 3s + 16}{(s+1)(s^2 + 4)}$$

4. 
$$\frac{1}{s^2 - 4}$$

5. 
$$\frac{7s^2 + 20s + 53}{(s-1)\left(s^2 + 2s + 5\right)}$$

6. 
$$\frac{s^2 + 1}{s^3 - 2s^2 - 8s}$$

7. 
$$\frac{1}{x^2 + 2x}$$

8. 
$$\frac{2x+1}{x^2-7x+12}$$

1. 
$$\frac{1}{s+1} + \frac{1}{s-2}$$

2. 
$$\frac{1}{s-4} + \frac{1}{s+2}$$

3. 
$$\frac{4}{s+1} + \frac{3s}{s^2+4}$$

4. 
$$\frac{\frac{1}{4}}{s-2} - \frac{\frac{1}{4}}{s+2}$$

5. 
$$\frac{10}{s-1} + \frac{-3s-3}{s^2+2s+5}$$

**6.** 
$$-\frac{1}{8}\frac{1}{s} + \frac{17}{24}\frac{1}{s-4} + \frac{5}{12}\frac{1}{s+2}$$

7. 
$$\frac{1}{2} \frac{1}{x} - \frac{1}{2} \frac{1}{x+2}$$

8. 
$$\frac{9}{x-4} - \frac{7}{x-3}$$