Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. State the proper form for the partial fraction decomposition of $\dfrac{2x+1}{(x+1)^3\left(x^2+4\right)^2}$.

2. Find the values of A and B in $\dfrac{x-9}{(x+5)(x-2)}=\dfrac{A}{x+5}+\dfrac{B}{x-2}$.