INTEGRATION

BY A SPECIAL MANIPULATION

Question 1

Carry out the following integrations:

1. $\displaystyle\int \frac{x+1}{x-1}\,dx$

2. $\displaystyle\int \frac{x-2}{x+2}\,dx$

3. $\displaystyle\int \frac{x+2}{x+5}\,dx$

4. $\displaystyle\int \frac{x-3}{x-8}\,dx$

5. $\displaystyle\int \frac{2x-3}{x+2}\,dx$

6. $\displaystyle\int \frac{3x-1}{x-1}\,dx$

7. $\displaystyle\int \frac{4x+3}{2x-1}\,dx$

8. $\displaystyle\int \frac{3-x}{x-1}\,dx$

9. $\displaystyle\int \frac{x+3}{2x-1}\,dx$

10. $\displaystyle\int \frac{3x+1}{2x-1}\,dx$