

$$a) \frac{2}{x} \quad \begin{array}{l} \text{npv} \\ x=0 \end{array}$$

$$b) \frac{x-5}{x^2-y} \quad \begin{array}{l} \text{npv} \\ x=0 \\ y=0 \end{array}$$

$$c) \frac{x+2}{x-3} \quad \begin{array}{l} \text{npv} \\ x=3 \end{array}$$

$$d) \frac{7x}{x(x+1)} \quad \begin{array}{l} \text{npv} \\ x=0 \\ x=-1 \end{array}$$

$$e) \frac{9}{x^2-16} \quad \begin{array}{l} \text{npv} \\ x=4 \\ x=-4 \end{array}$$

$$= \frac{9}{(x-4)(x+4)}$$

$$f) \frac{x+3}{x^2+7x+6} \quad \begin{array}{l} \text{npv} \\ x=-6 \\ x=-1 \end{array}$$

$$= \frac{x+3}{(x+6)(x+1)}$$

$$g) \frac{x+4}{x(x^2-3x-4)} \quad \begin{array}{l} \text{npv} \\ x=0 \\ x=4 \\ x=-1 \end{array}$$

$$= \frac{x+4}{x(x-4)(x+1)}$$

$$h) \frac{1-x}{x^3-7x^2} \quad \begin{array}{l} \text{npv} \\ x=0 \\ x=7 \end{array}$$

$$= \frac{1-x}{x^2(x-7)}$$

$$i) \frac{1-x^2}{3x^2+8x+4} \quad \begin{array}{l} \text{npv} \\ x=-2 \\ x=-\frac{2}{3} \end{array}$$

$$= \frac{1-x^2}{(x+2)(3x+2)}$$

$$\begin{array}{l} 3x^2+8x+4 \\ = 3x^2+6x+2x+4 \\ = 3x(x+2)+2(x+2) \\ = (x+2)(3x+2) \end{array}$$

$$\begin{array}{l} 3x+2=0 \\ 3x=-2 \\ x=-\frac{2}{3} \end{array}$$