

$$\text{α6η. 2 / Σ. 83}$$

$$\text{ii)} \quad 2x - \frac{5-x}{3} = -\frac{5}{3} + \frac{7x}{3} \Leftrightarrow$$

$$3 \cdot 2x - 3 \cdot \frac{5-x}{3} = -3 \cdot \frac{5}{3} + 3 \cdot \frac{7x}{3} \Leftrightarrow$$

$$6x - (5-x) = -5 + 7x \Leftrightarrow$$

$$6x - 5 + x = -5 + 7x \Leftrightarrow$$

$$6x + x - 7x = -5 + 5 \Leftrightarrow$$

$$0 \cdot x = 0$$

αόριστη ή ταυτότητα  
 έχει λύσεις όλους τους πραγματικούς αριθμούς.

$$\text{α6η. 8 / Σ. 74}$$

$$\text{(ii)} \quad \sqrt[9]{2^8} \cdot \sqrt[6]{2^5} = 2^{\frac{8}{9}} \cdot 2^{\frac{5}{6}} =$$

$$2 \cdot \sqrt[18]{2^{13}}$$

$$2^{\frac{8}{9} + \frac{5}{6}} =$$

$$2^{\frac{16}{18} + \frac{15}{18}} =$$

$$2^{\frac{31}{18}} =$$

$$2^{1 + \frac{13}{18}} =$$

$$= 2^1 \cdot 2^{\frac{13}{18}} = 2^{\sqrt[18]{2^{13}}} \quad o. \varepsilon. \delta.$$

α 6 u. 12 / 2 ε 2 8 4.

$$(i) \quad \frac{1}{x-1} + \frac{1}{x+1} = \frac{2}{x^2-1} \quad (\Leftarrow)$$

$$\frac{1}{x-1} + \frac{1}{x+1} = \frac{2}{(x-1)(x+1)} \quad (\Rightarrow)$$

$$\frac{1}{\cancel{x-1} \cdot \cancel{(x+1)}} + \frac{1}{\cancel{(x-1)} \cdot \cancel{(x+1)}} = \frac{2}{\cancel{(x-1)} \cdot \cancel{(x+1)}} \quad (\Rightarrow)$$

$$(\cancel{x+1}) \cdot 1 + (\cancel{x-1}) \cdot 1 = 2 \quad (\Leftrightarrow) \quad \cancel{x+1} + \cancel{x-1} = 2 \quad (\Rightarrow) \quad 2x = 2 \quad (\Rightarrow) \quad x = 1$$

$$\{k.n. = (x-1) \cdot (x+1) \neq 0 \quad (\Leftarrow)$$

$$x-1 \neq 0 \quad \vee \quad x+1 \neq 0$$

$$x \neq 1$$

$$x \neq -1$$

an appropriate  
or directly

$\Gamma_{1a}$  to gain

$\Sigma \varepsilon \lambda. 84$   $\times 6k. 11, 12_{ii}, 12_{iii}, 12_{iv}$

abu. 7.