

⑨ Reduce the fractions

$$(a) \frac{53^2 - 27^2}{79^2 - 51^2} = \frac{(53-27)(53+27)}{(79-51)(79+51)}$$

$$= \frac{(26)(80)}{(28)(130)} = \frac{\cancel{13}}{14} \left(\frac{8}{\cancel{13}} \right) = \frac{8}{14} = \frac{4}{7}$$