

True or false?

$$(i) \quad \frac{5}{x} + \frac{x}{1} = \frac{5+x}{x+1}$$

$$(ii) \quad 5 - (2-x) = (x-2) - 5$$

$$(iii) \quad 5 - (2-x) = x - (7-4)$$

$$(iv) \quad \frac{\sqrt{15} \cdot \sqrt{20}}{\sqrt{4}} = 5\sqrt{3}$$

$$(v) \quad \sqrt{1000} > 30$$

$$(vi) \quad \frac{\sqrt{5} + 1}{\sqrt{5}} = 1 + \frac{1}{\sqrt{5}}$$

$$(vii) \quad \frac{(1+x)}{2} \leq x$$

$$(viii) \quad \frac{2}{1+x} < \frac{1+x}{2} \quad \text{for all } x \geq 0$$

$$(ix) \quad |x-1| \geq x \quad \text{for all } x \leq 0$$

$$10) \textcircled{A} - 5(1-x) = 5x + 5$$

$$11) 5 - 5(x-1) = -5(-1+x) + 5$$

$$12) 5 - 5(1-x) = (1-x)$$

$$13) 5 - 5(1-x) = 5x$$

$$14) (5-5) + (1-x) = 1-x$$

$$15) \frac{(x-1)}{1-x} = -1$$

$$16) \frac{2-x}{2} = 1 - \frac{x}{2}$$

$$17) \frac{x-2}{2-x} = -1$$

$$18) x + \frac{1}{2} = \frac{2x+1}{2}$$