$2^y = 10$

8^{2y-1}
$= (2^3)^{2y-1}$
$= 2^{6y-3}$
$= 2^{6y} \cdot 2^{-3}$
$= (2^y)^6 \cdot 2^{-3}$
$= 10^6 \cdot 2^{-3}$
$= 1000000 \cdot \frac{1}{8}$
$= 125000$

$\therefore$ if $2^y = 10$, then $8^{(2y-1)} = 125000$

2) $(x-5)(x^2+2x-15) = x^2-25$
$(x-5)(x^2+2x-15) = (x+5)(x-5)$
$(x^2+2x-15) \div (x+5) =$ flip →

4) $\frac{4+8+12+\ldots+392}{5+10+15+\ldots+490}$
$= \frac{4(1+2+3\ldots+98)}{5(1+2+3+\ldots+98)}$
$= \frac{4}{5}$

$\therefore \frac{4+8+12+\ldots+392}{5+10+15+\ldots+490}$ exressed in simplest form is $\frac{4}{5}$

$x - 3 = 1$

$x = 4$

$\therefore$ one possible value for x is 4