

①

SMOOTH  
(NO FRICTION)

50 kg

$F_A = 100\text{ N}$

ENVIRONMENT

FBD: Box

a)  $a_x = ?$

b)  $F_N = ?$

$F_A = \text{APPLIED FORCE}$

$F_N (F_{SB})$

$F_A$

$F_g (F_{EB})$

Nov 17-9:45 AM

a) N2L ⊗:  $\Sigma F_x = m \cdot a_x$

$F_A = (50) a_x$

$100 = 50 a_x$

$a_x = 2.00 \frac{\text{m}}{\text{s}^2}$

b) N2L ⊙:  $\Sigma F_y = m \cdot a_y$   $g = 10 \frac{\text{m}}{\text{s}^2}$

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