

Windom

□1

$$(1) \frac{k}{2}(6k^2 + 3k - 1) \quad (2) \frac{k}{8}(9k^3 - 6k^2 - 5k + 2) \quad (3) \frac{k(k-1)(3k+2)}{2}$$

□2

$$(1) \frac{3}{4} \quad \frac{12\sqrt{7}}{7} \quad (2) \frac{-3 + \sqrt{57}}{2} \quad (3) \frac{4\sqrt{7}}{7}$$

□3

$$(1) \left(\frac{7}{6}, \frac{1}{6}\right)$$

$$(2) 0 \leq x \leq 1 \quad x - 1 \leq y \leq \frac{4}{27}x^3$$

$$1 \leq x \leq \frac{3}{2} \quad 0 \leq y \leq \frac{4}{27}x^3$$

$$\frac{3}{2} \leq x \leq 3 \quad 0 \leq y \leq x - 1$$

$$(3) \frac{41}{16}$$