

Bio390

Glucose and the Kidney

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USE THE FOLLOWING DATA TO ANSWER THE SUBSEQUENT QUESTIONS

$$\text{Inulin clearance: } \frac{125 \text{ ml}}{\text{min}}$$

$$\text{rate of urine formation: } \frac{1.0 \text{ ml}}{\text{min}}$$

$$\text{plasma glucose concentration: } \frac{80 \text{ mg}}{100 \text{ ml plasma}}$$

$$\text{urine glucose concentration: } \frac{0 \text{ mg}}{\text{ml}}$$

CALCULATE: reabsorption rate for glucose

ANS: _____

glucose clearance

ANS: _____

glucose filtration rate

ANS: _____

Assume you administer a drug that completely blocks renal reabsorption of glucose. What would be the clearance of glucose resulting from this procedure?

ANS: _____