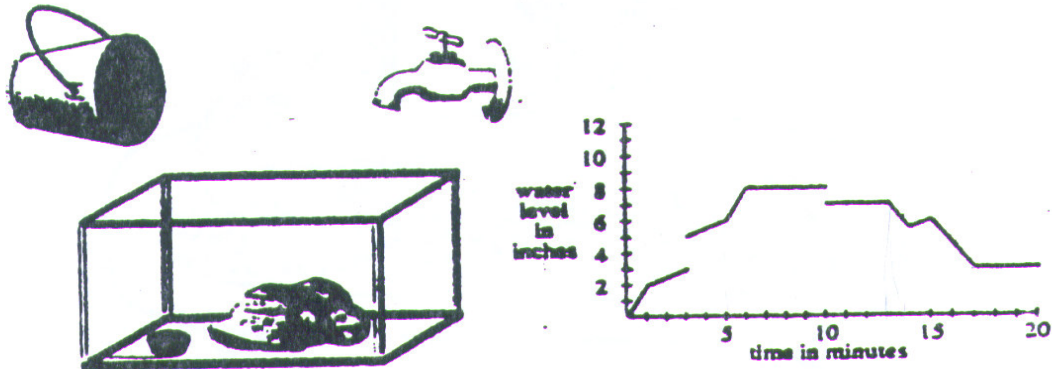


2. From *Calculus of a Single Variable*, by Thomas P. Dick and Charles M. Patton. The Oregon State University Calculus Connection Project, PWS Publishing Co., 1994, pp. 165—66, questions 16—25.



*For exercises 16 - 25*

*For exercises 16-25:* An illustration of an aquarium and a graph of its water level as a function of time is shown when the faucet is on. The water level rises at a steady rate. Similarly, when the plug is pulled out, the water level falls at a steady rate (but slower than the faucet's rate). At various times, some events happen that affect the water level and/or the rate at which the water level changes. In the exercises below, you are asked to identify at exactly what time the given event occurred.

16. The plug is pulled out with the faucet turned off.
17. A large rock is pulled out of the aquarium.
18. The plug is pulled out with the faucet turned on.
19. The plug is put in with the faucet turned off.
20. The plug is put in with the faucet turned on.
21. The faucet is turned on with the plug in.
22. The faucet is turned on with the plug out.
23. A bucket of water is dumped into the aquarium all at once.
24. The faucet is turned off with the plug in.
25. Th. faucet is turned off with the plug out.