Enrich

Enchanted Rock

Enchanted Rock is a pink granite dome located in Enchanted Rock State Natural Area in Central Texas. It is of the largest batholiths in the United States. A batholith is made of igneous rock and is the result of volcanic activity. The Enchanted Rock dome rises 425 feet above the ground and is 1,825 feet above sea level.

The entrance fee to Enchanted Rock State Natural Area is \$5.00 per person.

1. Complete the table to find the entrance cost for groups of different sizes.

Input (x)	1	2	3	4	5	6	7	8
Output (y)	\$5.00	\$10.00						

- **2.** Write an equation to represent the function displayed in the table in Exercise 1.
- **3.** If the park has 290 visitors, how much money does it collect in entrance fees?
- **4.** A local environmental group is planning to hike up Enchanted Rock. The group will cover each member's entrance fee and will provide lunch for its members. The group budgets \$75.00 for lunch, regardless of the number of people on the hike. Complete the table to show the total expenses of the group based on the number of people on the hike.

Input (x)	5	10	15	20	25	30
Output (y)	\$100.00	\$125.00				

- **5.** Write an equation to represent the function displayed in the table in Exercise 4.
- **6.** The group will hike up the dome at a rate of 1,500 feet per hour. What is their hiking speed per minute?
- 7. Complete the table to show the progression of their hike.

Input (min), x	1	3	5	8	10	12	15	
Output (ft), y	25	75						425

- **8.** Write an equation that represents the function displayed in the table in Exercise 7.
- **9.** At the rate given, how long will it take the group to reach the top of Enchanted Rock?