

Name: _____ Date: _____ Class: _____

Fire Pit Homework Worksheet

Your small engineering firm has been hired to design a fire pit for a client's new home. The client wants to line the outside of the fire pit with rocks and you need to know how many rocks to purchase in order to complete the job.

1. If you had enough rocks to make a circle with a diameter of 2 feet, what would be the area of the fire pit?
2. If you made a rock circle with a diameter of 4 feet, what would be the area of the fire pit?
3. How does the area of the second fire pit compare to the area of the first fire pit?
4. If you had a fire pit with a diameter of 6 feet, what would be the area of the fire pit?
5. From your results in the questions above, about the three fire pits, what generalizations can you make? Make an *in-out table* to help you answer this question.