

Picking Pizzas

Cheap Chuck and his friends are going out for pizza. The menu lists three sizes: small for \$10, medium for \$16 and large for \$22. In the past, Chuck and his friends found that 5 small pizzas were sufficient.

But Chuck has been thinking - might medium or large pizzas give better value?

- a. What additional information is required for Chuck to select the best value (the most pizza for the money)?
- b. Here are some additional facts: Chuck has \$50 to spend on pizza, and he doesn't mind taking home leftover pizza for tomorrow's breakfast. The small pizza is 20 cm in diameter, the medium is 30 cm in diameter and the large has a 40 cm diameter.

Using these facts, which choice gives the most pizza for the money?
Justify your choice, showing your calculations.

- c. Chuck then notices that there is a special on medium pizzas. If you buy one medium, you get the second medium pizza for half price.
Would the special be a better value than your choice in (b)? Show the calculations that support your answer.

Hints

There may be several ways to organize the information needed for your responses to these questions. You might consider tables, graphs, charts and/or equations.