

[Red Box]

Wernet, J., Lepak, J., Seashore, K., Nix, S., & Reinholz, D. (2011). Assessing what counts. Paper presented at Annual Meeting of American Educational Research Association. New Orleans, LA.

### Arranging Tables

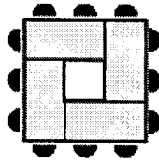
A company supplies tables for business meetings.

Each table is a rectangle, and can seat one person on its short edge, and two people on its long edge, like the figures on the right.

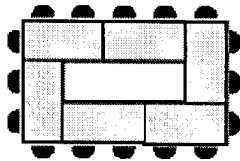


The diagrams below show how these tables can be made into arrangements for different numbers of people. The different arrangements are numbered, like the figures below.

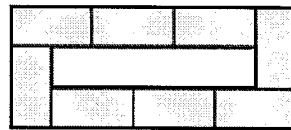
No one sits inside the arrangements of tables.



Size 1  
4 tables  
12 people



Size 2  
6 tables  
16 people



Size 3

- (1) How many people can sit at a Size 3 arrangement?
- (2) How many people can sit around a Size 13 arrangement? Please explain.
- (3) Write an equation for the number of people who can sit at a Size  $S$  arrangement. Explain how you know your equation will work.
- (4) What size arrangement is needed for 75 people? Explain how you know your answer is right.