Quiz Surprise

This is a two-stage quiz. During the first stage, use your knowledge & calculator to take this quiz. You have 15 min. In the second stage, you are now welcome to use your books, notes, and students in the class to retake the same quiz. You have 15 min. to write one solution (with everyone's name on it!) to be turned in for the group.

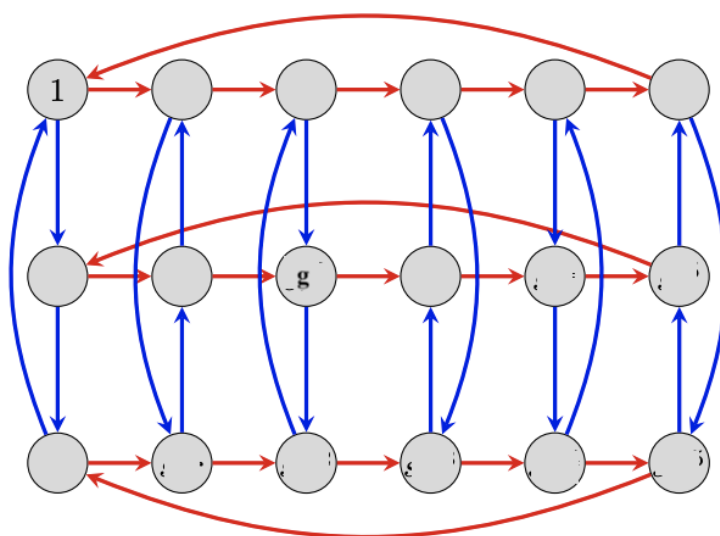Show your work as you would for a colleague. Partial credit requires reasonable support.

1. Consider the Cayley graph for the group G below.

   (a) [1] What's the order of G?

   (b) [1] How many generators for G are in the Cayley graph?

   (c) [2] What's the order of g?

   (d) [2] Is G abelian? Justify your answer.

2. Consider the cyclic group $C_{18} = \langle h \rangle$

   (a) [2] For what k values does h^k generate C_{18}?

   (b) [2] Find a minimal generating set for C_{18} of size 2.