

Group \_\_\_\_\_ Names \_\_\_\_\_

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## Group Quiz for Section 2.4

1. Peter and Juliette play darts. Peter hits the bullseye with probability  $p$  and Juliette hits it with probability  $j$ . Whoever hits the bullseye first wins. Peter goes first. Let  $X$  be the number of times Juliette throws the dart. Find the probability mass function of  $X$ . *Reminder*: it's often useful to write a general even number as  $2k$  and a general odd number as  $2k - 1$ .