

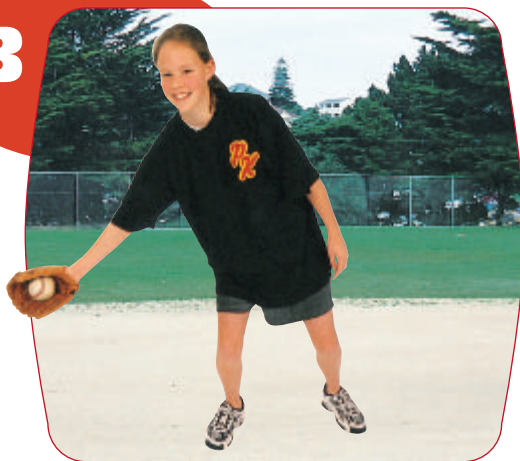
# Catch of the Match

ACTIVITY

Television Aotearoa is having a 3-week “catch of the match” promotion with a different prize each week. Viewers place the catches in order from best to worst. A panel of top sportspeople decides the winning order, and a winner is drawn from all the correct entries. Jonathan decides to send in all possible combinations so that he will have the best chance of his entry being picked.

Viewers see these 4 catches in week 1:

**B**



**A**



**C**



**D**



1. How many entries does Jonathan have to send in to be sure that one is correct? List all the possible combinations. A tree diagram may help.
2. In week 2, the TV company adds a fifth catch to the competition. How many entries will Jonathan now have to complete to be sure that one is correct?
3. If Jonathan sends in entries for all possibilities, can he be sure to win the prize? Why or why not?
4. In week 3, the TV company makes its competition even harder by adding one more catch. Does it still make sense for Jonathan to try to cover all combinations? Explain your answer.