



TG 6 In horse racing, betting on the trifecta pays on the first three horses in correct order, while the quinella pays on the first two horses in either order.

(a) In a 12-horse race, determine the number of possible quinellas.

(b) The Melbourne Cup is a 17-horse race.

Determine the number of possible trifectas.

(a) ${}^{12}C_2 = 66$

(b) $17 \times 16 \times 15 = 4080$

* These solutions have been provided by [projectmaths](http://projectmaths.com.au) and are not supplied or endorsed by NESA.

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