



## Probability

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# 2004

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- 16 In 2001 a quarter of the population of Wales reported having a limiting long-term illness or disability which restricted their daily activities.

What is the probability that out of a random group of three people who live in Wales, exactly one of them will have reported such an illness or disability?

- A  $\frac{9}{64}$
- B  $\frac{27}{64}$
- C  $\frac{37}{64}$
- D  $\frac{3}{4}$



## Probability

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**2006**

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- 8 A health club monitors the average heart rate of its members when using a cardiovascular workout machine. The lower quartile of the heart rate is 115, the upper quartile is 165.

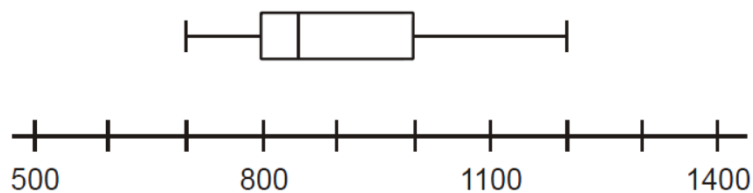
What is the probability that when a group of 4 members is chosen at random at least 3 of them had an average heart rate of more than 165 when doing this workout?

- A  $\frac{1}{256}$
- B  $\frac{3}{64}$
- C  $\frac{13}{256}$
- D  $\frac{5}{16}$
- E  $\frac{11}{16}$


**Probability**

# 2007

- 12** The box and whisker plot shows some information about members of a health club using a walking machine. It shows the number of steps that a group of 30 members did in a period of 10 minutes.



Use this information to find the probability that when 3 of these 30 members are chosen at random, they will all have taken between 850 and 1000 steps.

- A  $\frac{3}{4}$
- B  $\frac{150}{500}$
- C  $\frac{1}{8}$
- D  $\frac{3}{30}$
- E  $\frac{1}{64}$