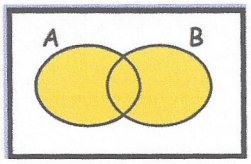
Name: _____ 5-a-day Higher Plus

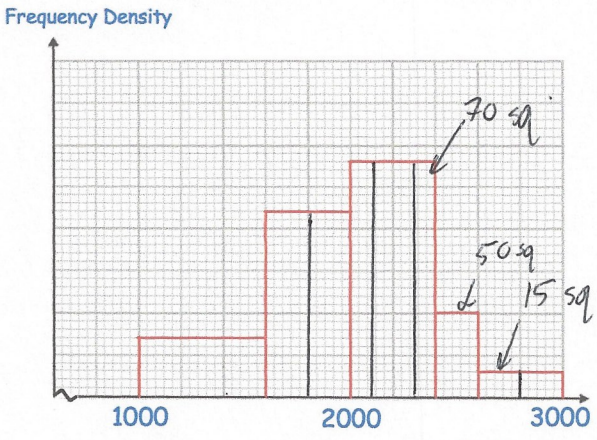
30th October

Corbettmaths

Which region is shown in yellow?

$A \cap B$ $A' \cap B$ $A \cup B$ $A \cup B'$





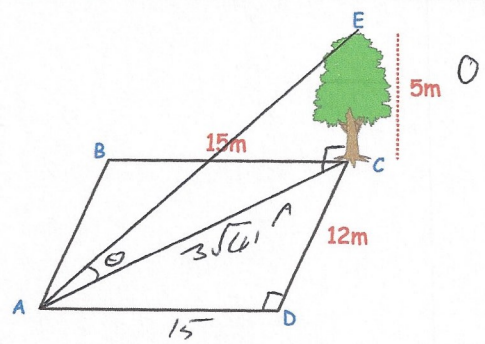
The histogram below shows the monthly salaries of employees.
There are 216 people who have a monthly salary of between £1800 and £2100.

Work out an estimate of how many employees have a salary of between £2300 and £2900

1800 - 2000:
$5 \times 22 = 110$ sq
2000 - 2100:
$2.5 \times 28 = 70$ sq
} 180 sq

216 people = 180 sq
1 person = $0.8\dot{3}$ sq

2300 - 2900: 135 sq
$135 \div 0.8\dot{3} = 162$ people



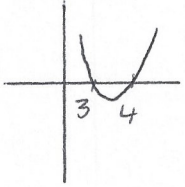
Calculate angle CAE.

$AC^2 = 12^2 + 15^2$
$AC^2 = 369$
$AC = 3\sqrt{41}$

$\tan\theta = \frac{5}{3\sqrt{41}}$ $\theta = 14.59°$

Carl says the solutions to $x^2 - 7x + 12 > 0$ is $3 < x < 4$ $(x-3)(x-4)$

Is he correct?
Explain your answer.



$x < 3$ or $x > 4$

No, Carl has given the answer to $x^2 - 7x + 12 < 0$