2nd June **Higher 5-a-day**

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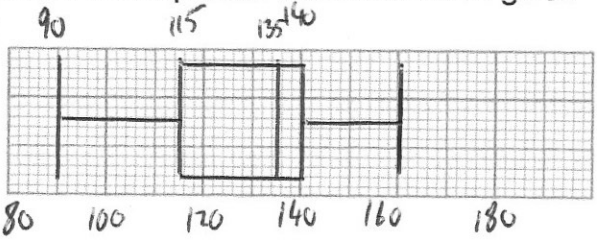
Lower Quartile	115
Median	135
Highest Value	160
Range	70
Interquartile Range	25

Lowest
160 - 70 = 90

UQ
115 + 25 = 140

Draw a box plot for the information given



Solve using the quadratic formula

$4x^2 - 12x + 9 = 0$

$a = 4$
$b = -12$
$c = 9$

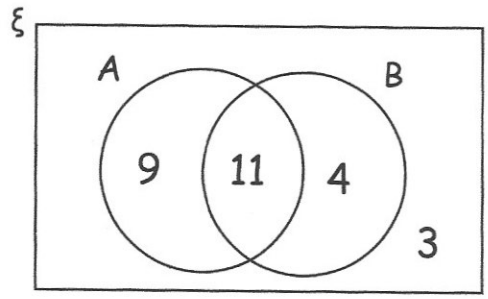
$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

$x = \frac{12 \pm \sqrt{144 - 144}}{8}$

$x = \frac{12 \pm \sqrt{0}}{8}$

$x = \frac{12}{8}$

$x = 1.5$

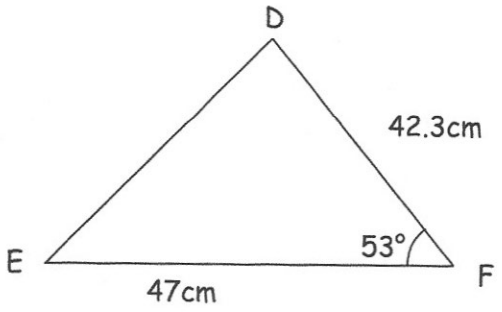


Write down P (A ∩ B)

$\frac{11}{27}$

Write down P (A' ∩ B')

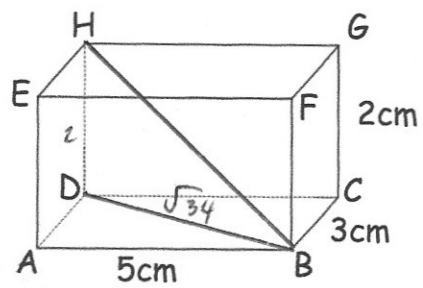
$\frac{3}{27} = \frac{1}{9}$



Find the area of DEF

$\frac{1}{2} \times 47 \times 42.3 \times \sin 53$

$= 793.88 \text{ cm}^2$



Calculate the length of diagonal BH.
Give your answer as a surd.

$BD^2 = 3^2 + 5^2$
$= 9 + 25 = 34$
$BD = \sqrt{34}$
$BH^2 = 2^2 + (\sqrt{34})^2$
$= 4 + 34 = 38$
$BH = \sqrt{38}$ cm

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