



- Convert an area of  $2\text{m}^2$  into  $\text{cm}^2$ .
- What is the area, in  $\text{m}^2$ , of a square with each side 10cm long?
- Solve the simultaneous equations:  
 $7c + 3d = 29$   
 $5c - 4d = 33$
- Write down the 100<sup>th</sup> term in the sequence 5, 9, 13, 17, 21, .....
- Calculate the distance between the points (5, 9) and (12, 11).
- Divide £350 in the ratio 2 : 5.

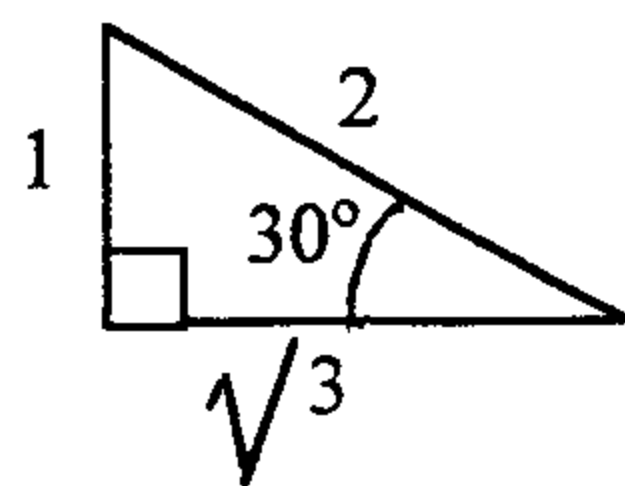
7. Find the shaded area, in  $\text{cm}^2$ .

6cm  
6cm

8. Evaluate the following using a calculator:  
(answers to 3 significant figures)

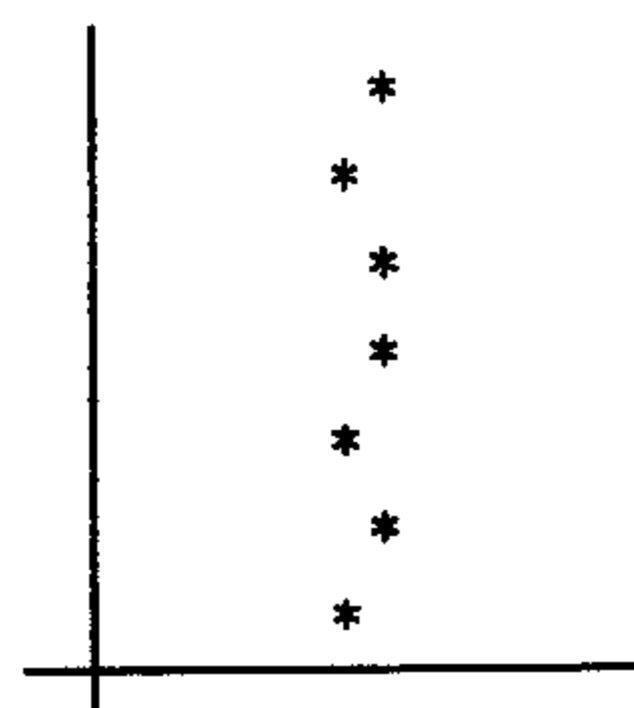
(a)  $\frac{202}{11 \times 8.21}$       (b)  $\sqrt{\left(\frac{85}{7.2 - 1.36}\right)}$       (c)  $\left(\frac{0.22}{0.171}\right)^4$       (d)  $\frac{8.3 - 2.04}{3.1 - 0.82}$

- Write  $3.2 \times 10^{-5}$  as an ordinary number.
- What is the value of  $0.2^2$  as a fraction?
- Which of the statements is (are) true?    A 1 only    B 2 only    C 3 only    D 2 and 3
  - $\tan 60^\circ = 2$
  - $\sin 60^\circ = \cos 30^\circ$
  - $\sin 30^\circ > \cos 30^\circ$



12. Which of the following has the smallest value?
- $\sqrt[3]{1000}$        $\frac{1}{0.01}$        $100^{\frac{1}{2}}$        $10^{-1}$

- Find the radius of a circle which has an area of  $45\text{m}^2$ .
- What correlation, if any, does this scatter graph show?



- How many mm are there in 1m 10cm?
  - Estimate the probability that the next President of France was born on a Friday.
  - Make  $x$  the subject of the formula  $m = \frac{a+x}{t^2}$
  - Work out the length  $d$ .
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- The  $n^{\text{th}}$  term of a sequence is  $u_n = n(n+2)$ . Find the largest value of  $n$  for which  $u_n < 200$ .
  - Adjacent angles in a parallelogram are  $x^\circ$  and  $2x^\circ$ . Find the size of the smallest angles in the parallelogram.