## Homework 13

Due in:

| 1. Evaluate $2^{7}$ | 3. Estimate the answer to <br> $\frac{56.1 \times 47.9}{91.6+12.1}$. Please show your <br> intermediate rounding. |
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| 2. $\frac{3}{4} \div \frac{5}{6} \quad$ (show working) | 4. What is the inverse function <br> for $x \rightarrow \frac{x+4}{3}$ |


| 5. What is the nth term of this sequence? $1,8,27,64,125, \ldots$ | 8. If you translate the point $(4,3)$ by $\binom{-1}{4}$, what are its new coordinates? |
| :---: | :---: |
| 6. Solve $4 \mathrm{x}-1=5 \mathrm{x}-6$ | 9. Showing a complete written method calculate, $120 \div 5$ |
| 7. Substitute $a=-6$ and $b=7$ into $3 a^{2}-5 b$ | 10. Find the area of this shape. (show working) |


| 11. $q=$ <br> $p=$ <br> $r=$ | 14. What is the circumference |
| :--- | :--- |
| of this circle? (show working) |  |
| (show working) |  |
| 12. What is the interior angle <br> of a regular octagon? | 15. What is $£ 240$ increased <br> by $20 \%$ ? |
|  |  |
| 13. A bag contains 3 red, 5 <br> green and 6 blue counters. A <br> counter is taken at random, <br> replaced and then a second <br> counter is taken from the bag, <br> what is the probability they <br> are both red? |  |


| 17. What is the area of this <br> circle? (show working) | 19. What is the height of a <br> parallelogram which has an <br> area of $50 \mathrm{~cm}^{2}$, and a base of <br> 10 cm . (show working) |
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| 18. Divide $£ 51$ in the ratio $12: 5$ | 20. The mean of 5 numbers is <br> 9.4 of the numbers are 6,11, <br> 15 and 5. What is the 5 th <br> number? |

## Total:

