Quick Revision Sheet 14

Some space is provided for quick calculations. Show your full working on a separate sheet where appropriate and hand this in to your teacher for marking.

1. A netball team can either win, draw or lose. The team plays 2 matches.

   (a) How many different outcomes are there altogether? C _____

   (b) How many different outcomes are there if the team plays 3 matches? C _____

2. The probabilities of the team winning and losing a match are 0.7 and 0.2 respectively. What is the probability of the team drawing a match? C _____

3. Write down the equation of a line that is parallel to $y = 4x - 5$ and passes through the point (2, 4) B _____

4. What is the equation of a line which passes through (0, 1) and (3, 5)? B _____

5. (i) Find the highest common factor of 36 and 54 C _____

   (ii) What is the LCM of 20 and 25? C _____

6. Multiply out and simplify $4(x-3)+2(x-1)-x$ B _____

7. Express x in terms of y, c and d when $y = cx + d$ B _____

8. Solve $y = x^2 - 12x + 40$ and $y = -2 + x$ simultaneously A* _____

9. A coat cost £90 in a sale. The original price was reduced by 10%. What was this original selling price? A _____

10. A trapezium has its two parallel sides 6cm and 8cm. The perpendicular height is 2cm. Calculate the area. C _____

11. Calculate the distance between (1, 3) and (9, 9) B _____

12. The point $A(4, 2)$ is reflected in the y–axis. Write down the coordinates of the image point A'. C _____

13. Expand and simplify $(3-4\sqrt{2})^2$ A _____

14. Calculate the circumference of a circle of area 50cm² A _____

15. A rectangle measures 10cm by 6cm. It is enlarged by a scale factor $\frac{1}{2}$. What are the dimensions of the enlarged rectangle? (Think scale factors.) B _____

16. A ship leaves a port P and travels 24km due north and then turns due east and travels a further 10km before turning again and travelling directly back to P.
How far has the ship travelled altogether? B _____

17. Solve the simultaneous equations
$x+3y=11,\ 5x-y=7$ B _____

18. Without a calculator find $64^{\frac{2}{3}}$ as a fraction A _____

19. Find the volume of a cylinder of height 12cm and base radius 6cm.
Give 4 significant figures in your answer. C _____

20. Simplify $\dfrac{x+5}{(x^2+6x+5)}$ A _____

21. A coin is tossed twice. Copy and complete the tree diagram below to show the outcomes. Find:

(a) the probability of obtaining two heads
(b) either a head or a tail in any order
(c) getting at least one head B _____
_____
_____