# Stick with Maths 

Maths puzzles

## Sticker stats

Use these player stats to solve the following football puzzles.


\section*{| side |
| :---: |
| iof 2 | Puzzle formation}

Nine players are in training before the final. They start passing the ball to each other using grids in this formation.

As the manager, you want a good balance of experience working together.


## $X \quad X \quad X$ $X \quad X \quad X$ <br> $X X X$



## Slide 2 of 2 PUZZIe formation

Look at the number of seasons in the Premier League for each player: from 1 to 9 .

Can you position the 9 players so that all their season numbers add up to 15 across each row and 15 down each column?

## $X X X$ <br> $X \quad X \quad X$ $X \quad X \quad X$



## Missing shirt

As the Kit Manager you are preparing the team's kit ahead of the match, but there is one shirt missing!

- The shirt number is 2 digits.
- It is less than 50 but more than 20.
- The sum of the 2 digits is 9 .
- The difference between the 2 digits is 3 .

Whose shirt are you looking for?


## $\underset{\substack{\text { side } \\ \text { 1of } 2}}{ }$ Roman confusion

The players have had a medical and as the Club Doctor you're entering their statistics onto the database. Disaster! The computer has changed all the numbers into Roman Numerals and one player's stats has been entered incorrectly.


## $\substack{\text { side } \\ 20 f 2}$ Roman confusion

Whose stats are incorrect?


Day of Birth
XX


Height in cm
CLXXX


Weight
XXVIII


Shirt number XXVIII


## Team selection

As the Manager you can only select 5 players to complete the starting team.

You can only select players who have shirt numbers which are:

- Multiples of 9.
- Square numbers.
- Prime numbers.

Which player is left to sit on the bench?


\section*{| side |
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| lof 2 | Team photo}

As the Club Photographer you've been asked to take a team photo of a selection of Premier League players who will be taking part in a 5-a-side charity match.

Can you help get the players into position?


## $\substack{\text { side } \\ 20 f 2}$ Team photo

Can you help get the players into position?

- Player A is the tallest player
- Player B is the goal keeper
- Player C is shorter than the players in the front row
- Player D is 4 cm shorter than player B
- Player E is 10 cm taller than player D




## Answers



## Missing shirt

Order of elimination:

- Van Aanholt - 3 - shirt number is less than two digits
- Doucouré - 16 - shirt number is not more than 20
- Tomori - 29 - sum of the two digits is not 9; red herring to test vocabulary with the digit 9
- Bertrand - sum of the two digits is not 9
- Moura - 27 - the difference between the two digits is not 3
- Longstaff - 36 - Correct Answer


## Roman confusion

## Gerard Deulofeu

His weight of 73 kg should be represented as LXXIII

## Team selection

Order of elimination:

- Moura - Tottenham - 27 This one is the only multiple of 9
- Doucouré - Watford - 16 / Van Dijk - Liverpool - 4 These are the only square numbers
- Pépé - Arsenal - 19 / Tomori - Chelsea - 29 The only prime numbers
- Boly - Wolves - 15 - Correct Answer


## Team photo

A. Harry Maguire (1.94m)
B. Mat Ryan (1.84m)
C. Patrick Von Aanholt (1.76m)
D. Callum Wilson $(1.80 \mathrm{~m})$
E. Sébastian Haller (1.90m)

