## Age Old Problems 1

Find the ages of the Smith family members and fill in the family tree. Nobody is aged over 100 so a 100 square is a useful help.

1. Bert is between 40 and 50 and his age is a multiple of 9 .
2. His wife Freda is less than 5 years younger than Bert. Her age is a multiple of 3.
3. Their only son John is younger than 20. His age is a prime number and the digits add up to 10.
4. His sister Flora is 4 years younger than John.
5. Bert and Freda's youngest child Anne has a single digit age. It is an even number and a factor of 56 . She is more than half the age of Flora.
6. Bert's married brother, Sam is older than Bert. His age is a square number and the digits add up to 13 .
7. Sam's wife Susan is less than 10 years older than Sam. Her age is a multiple of 11.
8. Sam and Susan's eldest son James (who is married) is $2 / 5$ of the age of Susan.
9. James' sister Jessica is younger than James by less than 10 years. Her age is a multiple of both 2 and 3 .
10. James' younger brother Steven has an age which is a square number. When he is 3 times his age now, he will be 48.
11. Sam and Bert's father Gerald is in his seventies. His age is a prime number. In less than 5 years he will be 80.
12. Gerald's wife is younger than him although also in her seventies. Her age is a prime number. The digits of her age add up to 10 .
13. James is married to Charlotte. Charlotte is in her twenties. Her age is divisible by $2,3,4,6$ and 8 .
14. James and Charlotte have a son Cameron whose age is an even square number.
15. Gerald and Ruth have an unmarried son Paul who is younger than Sam but older than Bert. His age is a prime number.

Age Old Problems 1


The Smith family tree.
Fill in the names and ages.



## Age Old Problems 2

Find the ages of the Jones family members and fill in the family tree. Nobody is aged over 100, so a 100 square is a useful help.

1. Sam was married when he was 22 years old. He lives at 115 Chestnut Crescent. His age is a multiple of both 5 and 7 but not a multiple of 2.
2. Sam's wife, Felicia came $204^{\text {th }}$ in the London Marathon. She is older than Sam and her age is a prime number. The digits of her age total 5 .
3. Jim is their oldest child. He ate 24 baked beans at breakfast. His age is a square number - it is only one digit.
4. Jim's sister Sarah has 4 rabbits. Her age is a factor of 54,72 and 84. When Sarah is $3 x$ as old as she is now, the digits of her age will add up to 9.
5. Sam and Felicia's youngest child Henry has chicken pox. He has 15 spots on his face. His is half the age of Sarah and $1 / 3$ of the age of Jim.
6. Sam's father Cyril is in his 70s. His age is a multiple of 24 . He retired from his last job when he was 65.
7. Cyril's wife Ruth is younger than Cyril. She retired from her job when she was 59. The difference between the 2 digits of her age is 6 . Her age is an odd number.
8. Cyril and Ruth have a daughter called Avis. She has a monthly clothes budget of $£ 200$. Her age is a square number. The second digit is twice the first digit.
9. Brian is a son of Cyril and Ruth. His age is 4 less than half of Cyril's age. He started his latest job as a traffic warden when he was 22.
10. Brian's wife, Samantha is older than Brian. She left university when she was 24 . Her age is a multiple of 7 . The difference between the digits of her age is 2 . Her age is an even number.
11. Brian's oldest son, Cameron has 25 stick insects. His age is a factor of 48 and 60 . He is at secondary school.
12. Cameron's sister, India has 72 songs on her mobile phone. Her age is a prime number. If her age is multiplied by one of its 2 digits, the answer is 39.
13. India's sister, Jane scored $76 \%$ on her latest Maths test. She is $1 / 4$ of her father's age.
14. Brian and Samantha' youngest child, Simon goes to Beagles Primary School. His age is a factor of his mother's age. It is not a prime number.
15. Avis recently married Marvin. Marvin is due to retire when he is 60 . When he is twice his current age, he will be 80 .

Age Old Problems 2
The Jones family tree.
Fill in the names and ages.


The Jones family tree.


## Age Old Problems 3

Find the ages of the Wilson family members and fill in the family tree. Nobody is aged over 100 , so a 100 square is a useful help.

1. Stuart was married when he was 20 years old. He has been married for twice as long as he was single.
2. Stuart's wife, Lizzie is older than Stuart. Her age is a cube number and a square number.
3. Their oldest son Cyril will be half way to 100 in ten years.
4. Last year their daughter Daphne's age was a square number. In 12 years' time, her age will be a square number again.
5. Stuart and Lizzie's younger son Ben's age has 2 digits. The sum of these digits is 1 less than the product of the 2 digits. The first digit is greater than the second digit.
6. Ben's wife, Sue drives a 1600 cc engine car. She is older than Ben. Ben is $80 \%$ of the age of Sue.
7. Jason is their oldest son. He plays number 7 for the school football team. His age has 2 digits. If you multiply them, the answer is the second digit. If you add them, the answer is the first digit.
8. Jason's sister, Beth was just over 3 kg when she was born. In 3 years' time, she will be $1 / 5$ of the age of her aunt Daphne.
9. Beth's younger brother, Joshua is ${ }^{10} / 16$ of Beth's age.
10. Daphne was married in Barbados. In 19 years' time, her husband will be twice as old as Daphne is now.
11. Cyril's wife Mia is $15 \%$ older than Cyril. They live at 43 Elm Green Rd.
12. Cyril and Mia's eldest son, Joe has just passed his driving test. His age is $45 \%$ of his father's age.
13. Joe's sister, Ruby hopes to beat her personal best of 15 seconds running the 100 m . Last year the square root of her age was 4.
14. Ruby's younger sister, Ann has been a member of the library for 6 years. The product of her age and half her age is 98.
15. Ruby and Ann have another brother Fred. His age is 0.2 of the age of his father.

## Age Old Problems 3



The Wilson family tree.


The Wilson family tree.

## Answers



