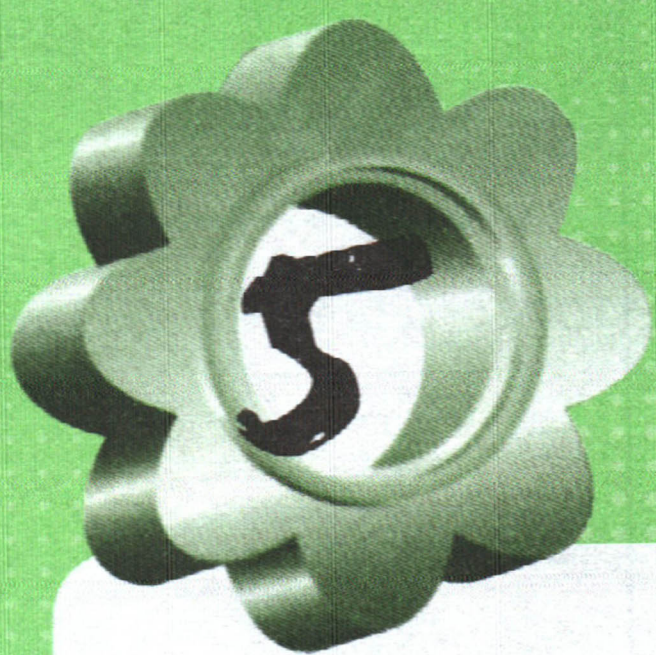




Age Problems

Remember the two points below when working on age problems.

1. The difference in age between two people will remain the same.
2. The multiple of a person's age to another age will change with time.

EXAMPLES



- 1 Amanda is 7 years old.
Her father is 36 years old.
How many years older will her father be than Amanda in 4 years' time?

Solution: The difference in age between them will remain the same.

$$36 - 7 = 29$$

Her father will be **29** years older than Amanda in 4 years' time.

- 2 Mr Jensen is 45 years old.
His daughter, Natalie, is 8 years old.
How many years older will Mr Jensen be than Natalie in 5 years' time?

Solution: The difference in age between them will remain the same.

$$45 - 8 = 37$$

Mr Jensen will be **37** years older than Natalie in 5 years' time.

- 3 Andrew is 8 years old.
His mother is 32 years old.
How many times Andrew's age is his mother's age?

Solution:

$$4 \times 8 = 32$$

or

$$32 \div 8 = 4$$

His mother is **4** times as old as Andrew.

- 4 Paula is 6 years old.
Her father will be 40 years old when Paula reaches the age of 10. How old is Paula's father?

Solution:

$$10 - 6 = 4$$

$$40 - 4 = 36$$

Paula's father is **36** years old.

- 5 Edward is 8 years old.
His mother is 32 years old.
In how many years' time will his mother be 3 times as old as Edward?

Solution: Since the difference in age will remain the same, we can make a table as shown on the right.

$$36 \div 12 = 3$$

$$12 - 8 = 4$$

or

$$36 - 32 = 4$$

Edward's age	His mother's age
8	32
9	33
10	34
11	35
12	36

His mother will be 3 times as old as Edward in **4** years' time.

PRACTICE



- 1 My mother is 25 years younger than my grandmother.
How many years older was my grandmother than my mother 5 years ago?

- 2 Chloe is 4 years old.
Her father is 36 years old.
How many years younger will Chloe be than her father in 8 years' time?

- 3 Shelia's father is 35 years old.
Her grandfather is 62 years old.
How old will each of them be in 12 years' time?

- 4 Tom is 6 years old.
His brother is 11 years old.
How many years older than Tom is his brother?
How many years younger will Tom be than his brother in 10 years' time?

- 5 The sum of Valerie's, her sister's and their father's age is 85.
Valerie is 22 years old. She is twice as old as her sister.
How old is their father?

- 6 My granny is 56 years old.
My mother is 31 years old.
I am 7 years old.
In how many years' time will the sum of our ages be 100?

- 7 Wilfred is 4 years old.
His father's age is 7 times his age.
How old is his father?

- 8 When Teddy was 5 years old, his father's age was 7 times his age.
When his father is 40 years old, how old will Teddy be?

- 9 Julia's mother is 36 years old.
Her father is 42 years old.
Given that Julia is 7 years old, in how many years' time will the sum of all their ages be 100?

- 10 Phyllis is 5 years old.
Her father is 40 years old.
In how many years' time will her father's age be 6 times Phyllis' age?

- 11 Anna is 5 years old.
Her mother is 33 years old.
In how many years' time will her mother's age be 5 times her age?

- 12 Wendy is 6 years old.
The sum of her age and her sister's age will be 40 in 9 years' time.
How old is Wendy's sister?

- 13** Mr Gibson is 5 years older than Mrs Gibson.
The sum of their ages will be 95 in 5 years' time.
How old is each of them?

- 14** Mrs Woody is 38 years old. She is 4 years younger than Mr Woody.
Jim, their youngest son, is 8 years old.
How many years from now will the sum of all their ages be 100?