

On the 1st of August, Dave and Matt both started part-time work at Harrods. Dave worked every second day, whilst Matt worked every third day. They both earned £20 per day.

- a) How many times in August would they work on the same day?
- b) How much more would Dave earn than Matt in August?



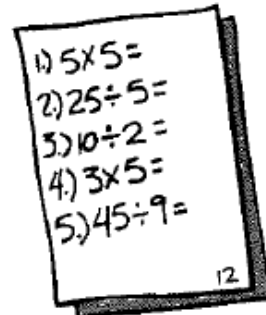
Answer:

Create/use a calendar

- a) **6 joint work days in August:** 1st, 7th, 13th, 19th, 25th, 31st
- b) Total days: Dave = 16 , Matt = 11
Dave earns £100 more compared to Matt [5 x £20]

What must the original number be?

- a) If you multiply the number by 5, then add 6, it makes 26.
- b) If you subtract 8 from the number, then square the result, it makes 16.
- c) If you halve the number, add 2, then multiply by 6, it makes 72.



Answer:

Work in reverse

- a. $26 - 6 = 20$ then $20 \div 5 = \underline{4}$
- b. $\sqrt{16} = 4$ then $4 + 8 = \underline{12}$
- c. $72 \div 6 = 12$ then $12 - 2 = 10$ then $10 \times 2 = \underline{20}$

In these related number sentences, each symbol represents one of the digits from 1 → 9. Which digit does each symbol represent?

$$\text{☪} \div \text{€} = \text{€}$$

$$\Psi - \text{€} = \text{☺}$$

$$\text{☪} \times \text{€} = \Psi$$

$$\Omega + \Omega = \text{€}$$

$$\infty \div \text{♫} = \text{♫}$$

$$\text{♫} + \text{€} = \rightarrow$$

$$\text{☪} - \Omega = \text{♫}$$

$$\text{☺} + \Omega = \text{☎}$$



Answer:

$$\Omega = 1$$

$$\text{☺} = 6$$

$$\text{€} = 2$$

$$\text{☎} = 7$$

$$\text{♫} = 3$$

$$\text{candle} = 8$$

$$\text{☪} = 4$$

$$\infty = 9$$

$$\rightarrow = 5$$