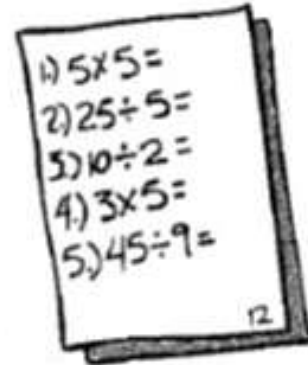


What must the original numbers be?

- a) If you add 5 to the number, then multiply the result by 2, it makes 26.
- b) If you halve the number, add 4, then halve the result, it makes 12.
- c) If you add 6 to the number, then multiply the result by 6, it makes 54.



**Answer:**

Work in reverse

a.  $26 \div 2 = 13$  then  $13 - 5 = \underline{8}$

b.  $12 \times 2 = 24$  then  $24 - 4 = 20$  then  $24 \times 2 = \underline{40}$

c.  $54 \div 6 = 9$  then  $9 - 6 = \underline{3}$

Zara had more than 40 marbles, but fewer than 80. She also made the following observations whilst counting them

→ When counted in groups of 5, there was 1 left.

→ When counted in groups of 6, there were 4 left.

→ When counted in groups of 4, there were 0 left.



● How many marbles did Zara have?

**Answer:**

$$76 \div 5 = 13 \text{ r } 1$$

$$76 \div 6 = 12 \text{ r } 4$$

$$76 \div 4 = 19$$

**76 marbles**

Chris wakes up at 7am every morning to get ready for school. He leaves home at 8am, walking to the train station. It takes him a third of his time to eat breakfast. It takes him three times as long to do his hair as it does to clean his teeth. Chris also makes his lunch and packs his school bag, both of which take him twice as long as brushing his teeth!

- How long does it take Chris to do each of his morning jobs?



**Answer:**

7:00am – 8:00am = 1 hour

Breakfast = 20 minutes so time left over = 40 minutes

**Hair = 15 minutes**

**Teeth = 5 minutes**

**Pack bag = 10 minutes**

**Make lunch = 10 minutes**