



Scientists have to use their critical thinking and problem solving skills while they are at sea. Can you work out the maths conundrums?

1. Maeve the scientist has to buy clothes for an expedition at sea. The total cost of a pair of shoes and a coat is €150. The lab coat costs €100 more than the pair of shoes.

**How much does each item cost?**

---



---



---

3. A scientist called Graham is publishing a book about his time at sea. Assume that published books are classified as novels, short stories, or story books based on the following classification.

- A novel has at least 500 pages
- A short story has at most 300 pages
- A story book has at most 700 pages

If Graham produces a book that has 600 pages which option applies.

- None of these
- Story book
- Novel
- Short story

Explain:

---

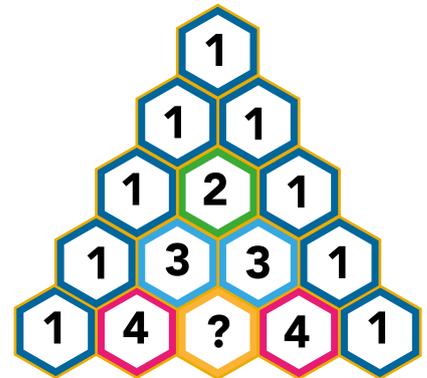


---



---

2. PASCAL'S lost some fishy fish in the wetlab of the research vessel. Can you work out the value of the missing number in the diagram?



The value of the lost fish is:

---

Explain your answer:

---



---



---

4. It takes a scientist called Ciaran an hour and a half to walk clockwise around a vessel. When he walks anti-clockwise around the same vessel, it only takes him ninety minutes.

**Why is this difference?**

- Ciaran is a great walker
- Walking clockwise takes more time
- There is no difference
- Walking anti-clockwise takes less time

1. €25 (A PAIR OF SHOES = €25 for each item)  
2. The value of the missing fish is: 6 (Each number is equal to the sum of the two numbers above it.)  
3. Either a novel or a story book (A 600 page book has more than 500 pages and could be a novel. A 600 page book less than 700 pages and could be a story book)  
4. C: there is no difference (there is 60 minute in an hour + 30 minutes in a half hour = 90 minutes)

**ANSWERS:**