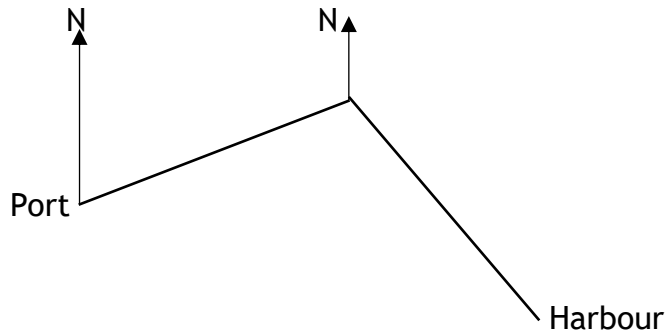1. A ship leaves a port P and sails 72km on a bearing of 075°.
   It then sails on a bearing of 155° for 85km to a harbour.

   Calculate the distance between the port and the harbour.

2. A source of bacteria is increasing at a rate of 1.2% per hour on a surface.
   Initially, there are 4.38×10^{15} bacteria present.
   How many bacteria will be expected to be present after 4 hours?
   Round your answer correct to 3 significant figures.

3. After a journey, a car had used 22% of its fuel. It still had 48 litres of fuel in the tank.
   How many litres of fuel did it have before the start of the journey?

4. A function has equation $f(x) = 2x^3 - 7x + 5$. Evaluate $f(-2)$.

5. Change the subject of the formula below to H.

$$\frac{2}{3}P = 2H^3 + Q$$

6. A function has equation $f(x) = x^3 + 8x - 3$. Evaluate $f(-2)$

7. Solve the system of equations below.

$$4x - 3y = 18$$
$$3x - 2y = \ 13$$