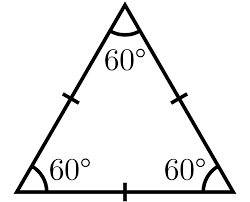
**Trigonometry**

**What is a radian angle?**



If we bend one side what will happen to the measure of the opposite angle?

a) decrease

b) stay the same

c) increase

**Exercise 1**

Convert the angles:

a) b) c)

**How to read a radar?**

Chart, radar chart

Description automatically generated

|  |  |
| --- | --- |
| direction | azimuth |
| N |  |
| E |  |
| W |  |
| S |  |

**Exercise 2**

A submarine accompanies a ship on its voyage.

At each point in time, the ships distance is 200 meters in the direction 060.

The submarine captain spots a dangerous reef located directly north from the submarines’ location, 200 m away.

1) Plot the point locating the reef in Geogebra.

2) What is the distance from the ship to the reef? \_\_\_\_\_\_\_\_\_\_\_\_\_

3) What would be the reefs azimut when observed from the ship? \_\_\_\_\_\_\_\_\_\_\_\_

The ships safe harbour is located 400 m away, in the direction 300 from the current submarine location.

1. Plot the harbour location
2. Determine the distance from the ship to the harbour

Sine law

Cosine law

1. Determine the course (azimuth) of the ship if it wants to reach the harbour

**Exercise 3**

Find the missing value and correct a mistake:

Direction Rogac – Split 043

Direction Rogac – Signal \_\_\_

Distance Rogac – Split 15.1 km

Direction Signal – Split 345

Direction Signal – Rogac 240

Find the distance between the Signal and the nearest harbour.