Exercise 1

a.

A

B

C

D

AB = DC

BC = AD

Answer = AD

b.

Answer = 3

Exercise 2

5

135®

?

a

3

Finding a

c^2 = a^2 + b^2 – 2ab\*cos(C)

a^2 = 5^2 + 3^2 – 2x3x5\*cos(135)

a^2=55.21

a = sqrt (55.21)

a=7.43

Magnitude = 7.43

Finding ?

a/sin(135) = 5/sin(?)

7.4/sin(135) = 5/sin(?)

sin(?) = (5\*sin(135)/7.4)

? = asin(5\*sin(135)/7.4)

? = 28.54

Direction = 90 degrees – 28.54

Direction = 61.46 degrees