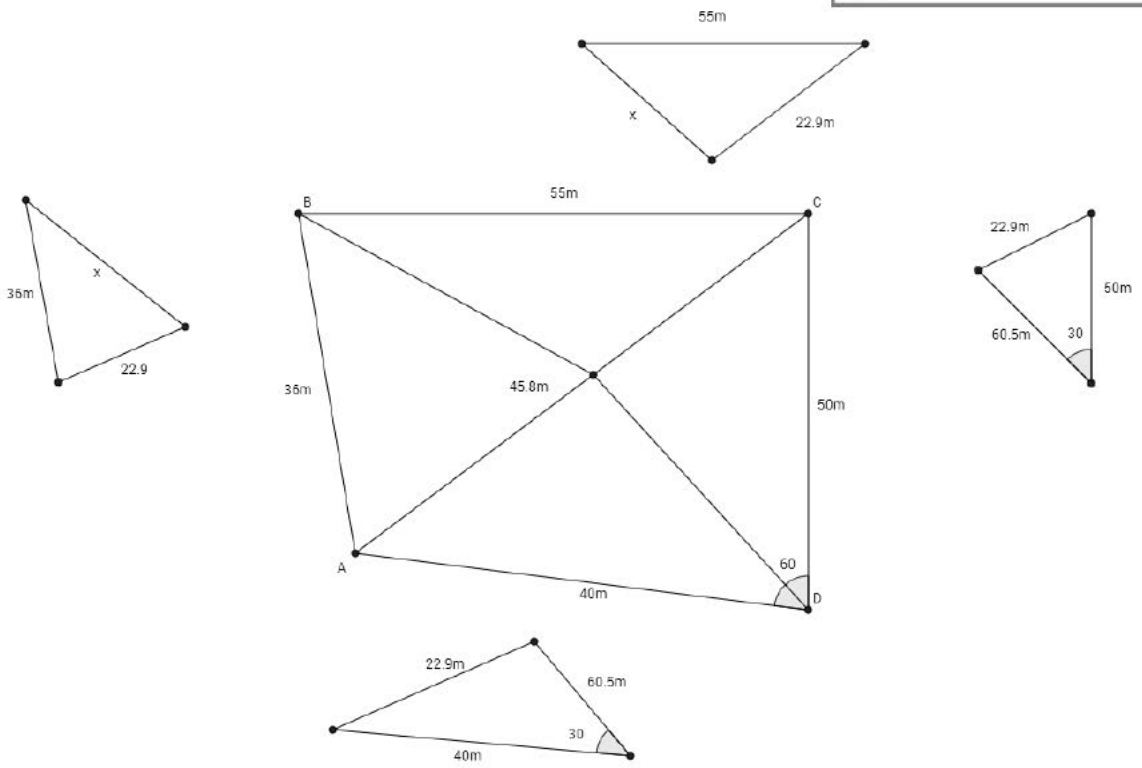
Student 6: High Not Achieved

NZQA Intended for teacher use only



1. By calculating the length of the pipeline running through the land

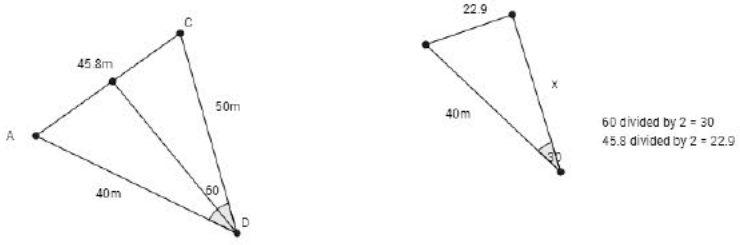
$x^2 = 40^2 + 50^2 - 2 \times 40 \times 50 \times \cos 60$

$x^2 = 2100(\sqrt{\ })$

$x = 45.8m$

1

2. Land can be divided into 4 sections each of more than 400m^2



2

$x = \dfrac{\sin 30}{22.9} \times 40 = 0.87(\sin^{-1}) = 60.5m$

3

$Area = \dfrac{1}{2} \times 22.9 \times 40 \times \cos 60.5$

$Area =$

© NZQA 2019