GIS: Data integration for solar water heaters (SWHs)

1. Explain the GIS concept: data integration.

---------- (1x2)

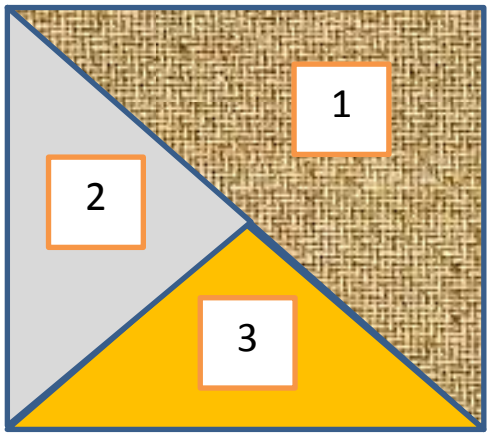
2. Your company, SA Solar Heaters, has won a tender to install 200-litre SWHs in low-income residential areas (formal settlements). Apply GIS data integration to create a **new** spatial data layer.

2.1 In the block New spatial data layer, draw in the new layer. (1x2)

2.2 On the new spatial data layer, identify the low-income residential area (formal settlement) where 200-litre SWHs can be installed that suit the domestic needs of the residents.

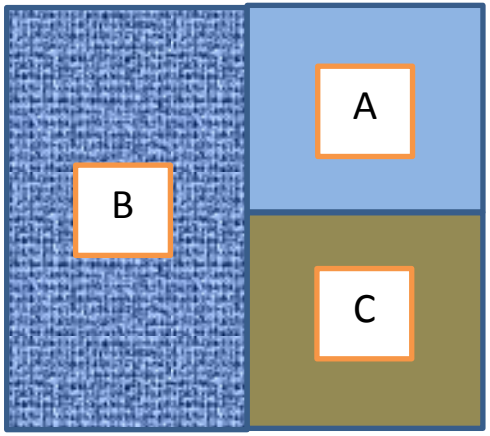
(1x2)

Layer 1: Land use zones



1 – Commercial zone
2 – Low-income residential areas (informal settlement)
3 – Low-income residential areas (formal settlement)

Layer 2: SWH system sizes[1]



A – 150-litre SWHs
B – 200-litre SWHs
C – 300-litre SWHs

New spatial data layer

[1] Specifications according to SESSA (Sustainable Energy Society of Southern Africa) http://www.sessa.org.za/