**Work out total diversity for a typical domestic installation**

1. Electric cooker: 2 x 3.15 kw & 3 x 1.5 kw hob plates, 1 x 3.5 kW top oven & a 1 x 4.0 kw main oven and fitted with a 13A socket outlet
2. 32 amp kitchen ring main
3. 32 amp upstairs ring main
4. Downstairs lighting circuit consisting of 16 lighting points
5. 3kw Immersion Heater
6. 8.5kw Electric shower
7. 32 amp downstairs ring main
8. Upstairs lighting circuit consisting of 9 x lighting points

**Work out total diversity for a typical Retail installation**

1. 32 amp Warehouse ring main
2. 32 amp shop front ring main
3. lighting circuit consisting of 25 x 11 watt LED lighting points and 1 x 500 watt halogen security light in the warehouse
4. 4 x 3kw Electric instant hand wash
5. 16 amp radial circuit for kitchen area
6. lighting circuit consisting of 8 20 watt shop front lighting points