**Week 2 Exercise 15, 16 Worksheet**

Exercise 15

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| Why is Voltage Drop important? |
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| List three factors that would increase Voltage Drop. | |
| 1. |  |
| 2. |  |
| 3. |  |

Calculate the voltage drop in this example from the video, as a **percentage** of the nominal voltage at the point of supply.

Diagram

Description automatically generated

Exercise 16

Use the formula above and the values from Table C8 to answer the following questions.

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| 1. Calculate the percentage voltage drop in a 50m run of 16mm2 cable carrying three-phase (400V) 32A. |
| 1. Calculate the smallest suitable cable conductor size required in a 125m run of cable carrying three-phase (400V) 80A. |

Did you calculate answers of 0.97% (2 d.p.) and 25mm2 ?

What would your answer to Question 1 be if the supply was single-phase 230V?