**Module 5 Week Three Exercise 12 and SDL Worksheet**

Exercise 12

Test your understanding of scale drawing.

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| 1. What does a scale of 1:50 mean in a house floor plan?
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| 1. Why are scales used in house floor plans?
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| 1. A floor plan has a scale of 1:500. If the distance between two rooms on the floor plan is 6 cm, what is the actual distance between the two rooms?
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| 1. A floor plan has a scale of 1:100. The kitchen on the floor plan measures 4m by 3m. What is the actual area of the kitchen in m2?
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| 1. A floor plan has a scale of 1:50. The living room on the floor plan measures 6m by 5m. What is the actual perimeter of the living room in metres?
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| 1. A floor plan has a scale of 1:100. The distance between two electrical outlets on the floor plan is 3m. What is the actual distance between the two outlets in metres?
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1. The lines shown in the table represent dimensions from a drawing. For each line, measure the length in millimetres then determine the actual size of the dimensions.

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| # | Line | Scale |
| 1:50 | 1:100 | 1:20 |
| a.  |  |  |  |  |
|  b. |  |  |  |  |
|  c. |  |  |  |  |
|  d. |  |  |  |  |

1. Determine the scale size of the dimension given in the table for the scale specified.

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| # | Length Dimension | Scale | Scale Size |
| a.  | 17500 | 1:100 |  |
|  b. | 1860 | 1:20 |  |
|  c. | 14500 | 1:500 |  |
|  d. | 25 | 2:1 |  |

SELF-DIRECTED LEARNING

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| 1. The diagram shows the Eiffel Tower in Paris. Alongside the tower is a super yacht. Both diagrams are drawn to the same scale and the real length of the yacht is 110 metres.
2. Measure the length of the yacht in the diagram in cm and find the scale.
3. Use this scale to calculate the actual height of the Eiffel Tower. (Show working.)
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| 1. The following drawing shows a scale diagram (floor plan) of a house.

Diagram  Description automatically generated1. Use the scale to calculate the floor area of the house in m2.
2. The owner of the house decides to add a deck adjoining the right wall of the lounge. The deck will be 3m wide. Using the same scale, sketch the new deck on the plans.
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