Lesson #5 - Scale Diagrams & Reductions Name:

Focus: Date:

Part A: Introduction



Part B: Examples

1. Determine the scale factor for each reduction as a fraction or decimal.
2. b)

 

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| **Learning Goal:** | Beginning | Progressing | Achieving | Excelling |
| *I can find the scale factor* |  |  |  |  |

Ex.2) A reduction of each object is to be drawn with the given scale factor. Determine the corresponding length in centimetres on the scale diagram.

1. A bicycle has a wheel with diameter about 60 cm. The scale factor is$\frac{3}{50}$.
2. A sailboat has length 8 m. The scale factor is 0.02.

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| **Learning Goal:** | Beginning | Progressing | Achieving | Excelling |
| *I can find the corresponding length on scale diagram* |  |  |  |  |

Ex.3) Which of rectangles A, B, and C is a reduction of the large rectangle? Show work.



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| *I can justify a reduction* |  |  |  |  |

Ex.4) Here is a scale diagram of the top view of a truck. The length of the truck is 4 m.

 Scale 1:50

1. The front and back wheels of the truck are 3.85 m apart. How far apart should the wheels be on the scale diagram?
2. What is the width of the truck?

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| *I can calculate given a scale* |  |  |  |  |

Ex.5) Which two polygons have pairs of corresponding lengths that are proportional? Identify the scale factor for the reduction.



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| *I can find proportion* |  |  |  |  |

Ex.6) Draw a scale diagram of this octagon. Use a scale factor of 0.25.

