**AW MATH 11 - Ch. 7 Scale Factor EXTRA PRACTICE**

1. Emma is a limousine driver who often needs to read a map. The map she is currently looking at has a scale of

2 cm to 8 km. What **scale factor** must Emma use to convert a distance on the map to the actual distance in **~~kilometres~~ centimeters**?

|  |  |
| --- | --- |
| a. | 0.00 000 25 |
| b. | 0.00 025 |
| c. | 4000 |
| d. | 400 000 |

1. Ashika collects model toy cars, which are built using a 1:45 scale. One model of a convertible is 9.6 cm long, and 3.1 cm wide. How **wide** is the actual car in **METERS**? To the Nearest tenth

Answer: \_\_\_\_\_\_\_\_\_\_\_m

1. Justin wants to build a scale model of a building. The actual building is 90 m tall, 30 m wide and 50 m long. What could be possible dimensions of the scale model?

|  |  |
| --- | --- |
| a. | 9 in. tall, 4 in. wide, 5 in. long |
| b. | 9 mm tall, 5 mm wide, 3 mm long |
| c. | 18 cm tall, 6 cm wide, 10 cm long |
| d. | 16 cm tall, 5 cm wide, 8 cm long |

1. **How many** **1 cm linking cubes** would you need to make a scale model of a rectangular prism 50 m long by 30 m wide by 10 m high, using a 1 : 500 scale?

Answer:\_\_\_\_\_\_\_\_\_\_cubes

1. A computer chip on a circuit board is a rectangle. The width is 6 mm. The length is 12 mm. James is using a scale of 14 : 1 to draw plans for the circuit board. What is the **width** of the **drawing in CENTIMETERS**?

To the nearest tenth

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_cm

1. Kyle wants to create a scale diagram of a rectangle with length 80 in. and width 72 in. If he wants to use the scale: 1 square = 9 in by 9 in., what is the **width of the scale diagram in SQUARES**?

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_squares