Enlargement, length and area

This task is about how the scale factor enlargement affects length, area, and volume of 2 and 3 dimensional shapes.

2 m 2 m
[Not drawn to scale]
a) If the square above was enlarged by a scale factor of 5:
i. what would be the length of each side? metres
ii. what would be the area? square metres
iii. Complete the following sentence.
The area of the enlarged square would be times the area of the original square.
b) If the regular hexagon above was enlarged by a scale factor of 4 i. What would be the length of each side? ii. Complete the following sentence. The area of the enlarged hexagon would be times the area of the original hexagon.
2 m [Not drawn to scale] c) If the cube above was enlarged by a scale factor of 3:
 i. What would be the length of each side? ii. What would be the volume? iii. Complete the following sentence. The volume of the enlarged cube would be times the volume of the original cube.

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