




New Maths GCSE: R12 & G19 - Similarity - Length, Area and Volume Scale Factors

Name:.....

Date:.....

Length Scale Factor	x 3
Area Scale Factor	x 
Volume Scale Factor	

What should replace the star?

A 27 **B** 9
C 6 **D** 3

Correct Answer: A B C D

Explanation:


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Length Scale Factor	x 5
Area Scale Factor	
Volume Scale Factor	x 

What should replace the star?

A 15 **B** 5
C 25 **D** 125

Correct Answer: A B C D

Explanation:


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Length Scale Factor	x 4
Area Scale Factor	x 
Volume Scale Factor	

What should replace the star?

A 8 **B** 4
C 16 **D** 64

Correct Answer: A B C D

Explanation:


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Length Scale Factor	$\times \frac{1}{4}$
Area Scale Factor	
Volume Scale Factor	\times 

What should replace the star?

A $\frac{1}{4}$ **B** $\frac{1}{12}$
C $\frac{1}{16}$ **D** $\frac{1}{64}$

Correct Answer: A B C D

Explanation:

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Length Scale Factor	$\times \frac{1}{3}$
Area Scale Factor	\times 
Volume Scale Factor	

What should replace the star?

A $\frac{1}{6}$ **B** $\frac{1}{3}$
C $\frac{1}{9}$ **D** 3

Correct Answer: A B C D

Explanation:

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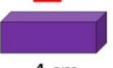

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A  4 cm **B**  6 cm

These two shapes are similar.
 What is the Area Scale Factor to get from A to B?

A 4 **B** 3
C 1.5 **D** 2.25

Correct Answer: A B C D

Explanation:

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A  3 cm **B**  6 cm

These two shapes are similar.
 What is the Volume Scale Factor to get from A to B?

A 2 **B** 6
C 8 **D** 27

Correct Answer: A B C D

Explanation:

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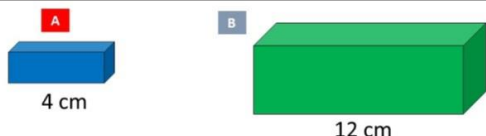
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These two shapes are similar.
 What is the Area Scale Factor to get from A to B?

A 9 B 4
 C 6 D 3

Correct Answer: A B C D

Explanation:

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Length Scale Factor	
Area Scale Factor	x 4
Volume Scale Factor	x *

What should replace the star?

A 8 B 16
 C 64 D 4

Correct Answer: A B C D

Explanation:

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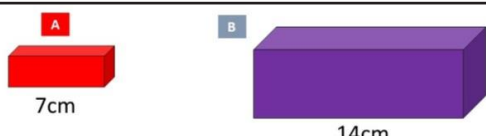
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These two shapes are similar.
 What is the Length Scale Factor to get from B to A?

A -7 B 7
 C 2 D $\frac{1}{2}$

Correct Answer: A B C D

Explanation:

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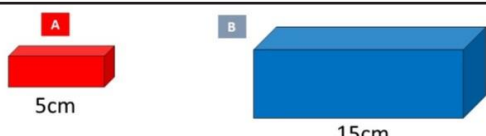
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These two shapes are similar.
 What is the Length Scale Factor to get from A to B?

A 3 B 2
 C 10 D 9

Correct Answer: A B C D

Explanation:

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A B

2 cm 8 cm

These two shapes are similar.
 What is the Volume Scale Factor to get from B to A?

A -4 B 4
C $\frac{1}{64}$ D $\frac{1}{4}$

Correct Answer: A B C D

Explanation:

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