

# Exit Ticket S3 - Volume and Surface Area of Non Prisms




Name: .....

Date: .....

**Diagnostic Questions**

Which is the correct calculation to work out the volume of the **hemisphere** below with a radius of 8cm?



Volume of sphere =  $\frac{4}{3}\pi r^3$   
Surface area of sphere =  $4\pi r^2$

<b>A</b>	$\frac{4}{3} \times \pi \times 8^3$
<b>B</b>	$\frac{4}{3} \times \pi \times 4^3$
<b>C</b>	$\frac{2}{3} \times \pi \times 4^3$
<b>D</b>	$\frac{\frac{4}{3} \times \pi \times 8^3}{2}$

Correct Answer: A B C D

Explanation:

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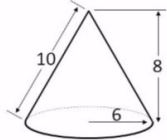
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To work out the volume of this solid, you do

<b>A</b>	$\frac{1}{3} \times \pi \times 6^2 \times 10$	<b>B</b>	$\frac{1}{3} \times 6 \times 8 \times 10$
<b>C</b>	$\frac{1}{3} \times \pi \times 8^2 \times 6$	<b>D</b>	$\frac{1}{3} \times \pi \times 6^2 \times 8$

Correct Answer: A B C D

Explanation:

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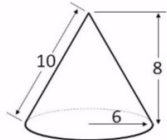
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To work out the curved surface area of this cone, you do

<b>A</b>	$\pi \times 6 \times 10$	<b>B</b>	$\pi \times 6^2 \times 10$
<b>C</b>	$\pi \times 6 \times 10 + \pi \times 6^2$	<b>D</b>	$\pi \times 6 \times 8$

Correct Answer: A B C D

Explanation:

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