

Algebra 1 9/24

Warm Up
AIMS Web 2

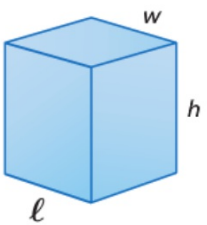
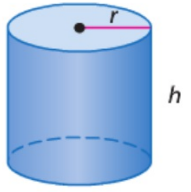
0-10 Surface Area

I can find the surface area of rectangular prisms and cylinders
Surface Area

is the sum of the areas of all the surfaces, or faces, of a solid. Surface area is measured in square units.

$$SA = 2\pi rh + 2\pi r^2$$

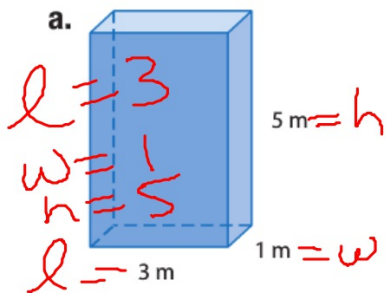
KeyConcept Surface Area

Prism	Cylinder
	
$S = 2lw + 2lh + 2wh$	$S = 2\pi rh + 2\pi r^2$

$$SA = 2lw + 2lh + 2wh$$

I can find the surface area of rectangular prisms and cylinders

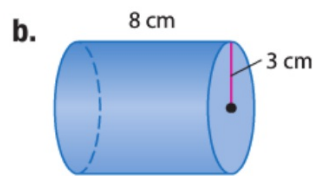
Ex. 1 Find the surface area of each solid. Round to the nearest tenth if necessary.



$$S = 2lw + 2lh + 2wh$$

$$SA = 2 \cdot 3 \cdot 1 + 2 \cdot 3 \cdot 5 + 2 \cdot 1 \cdot 5$$
$$6 + 30 + 10$$

$$SA = 46\text{ m}^2$$



$$r = 3$$
$$h = 8$$

$$S = 2\pi rh + 2\pi r^2$$

$$SA = 2\pi \cdot 3 \cdot 8 + 2\pi \cdot 3^2$$
$$= 48\pi + 18\pi$$
$$= 66\pi$$

$$SA \approx 207.3\text{ cm}^2$$

I can find the surface area of rectangular prisms and cylinders

ICA

$$S = 2\ell w + 2\ell h + 2w$$

$$S = 2\pi rh + 2\pi r^2$$

(In-class assignment)

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Hmwk

IXL 7th AA.8