

# MasterMath



Geometry

## SURFACE AREA OF PRISMS



---

---

---

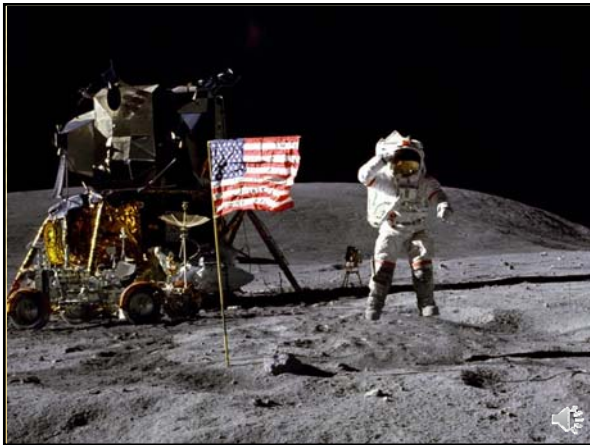
---

---

---

---

---



---

---

---

---

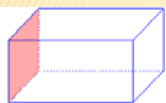
---

---

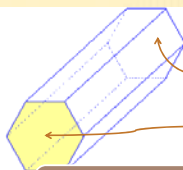
---

---

## SURFACE AREA OF PRISMS

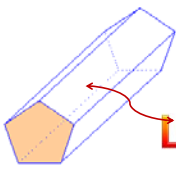


Rectangular prism



**Base**

Number of Lateral Faces =  
Number of Sides in Base



Pentagonal prism

**Lateral Face**



---

---

---

---

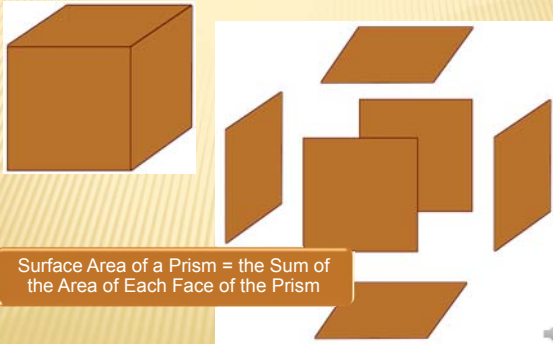
---

---

---

---

**SURFACE AREA OF PRISMS**



Surface Area of a Prism = the Sum of the Area of Each Face of the Prism

---

---

---

---

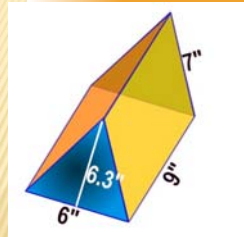
---

---

---

---

**SURFACE AREA OF PRISMS**



Total  
 $37.8 + 180$   
 $= 217.8 \text{ sq. in.}$

De-Construct Shape:

2 Triangular Bases:

$$2 * \frac{1}{2} * 6 * 6.3$$

$$= 37.8 \text{ sq. in.}$$

3 Lateral Faces

$$2 * 9 * 7 + 1 * 9 * 6$$

$$= 180 \text{ sq. in.}$$

You Try

---

---

---

---

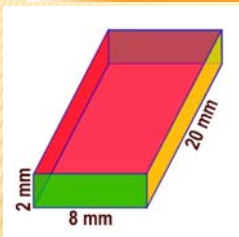
---

---

---

---

**SURFACE AREA OF PRISMS**



You Try

---

---

---

---

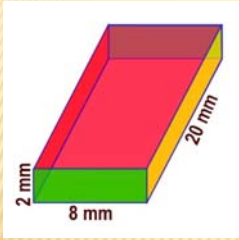
---

---

---

---

**SURFACE AREA OF PRISMS**



De-Construct Shape:

2 Rectangular Bases:

$$2 * 2 * 8$$

$$= 32 \text{ sq mm}$$

4 Lateral Faces

$$(2 * 20 * 2) + (2 * 20 * 8)$$

$$= 400 \text{ sq mm}$$

Total  
32 + 400  
= 432 sq mm

You Try

---

---

---

---

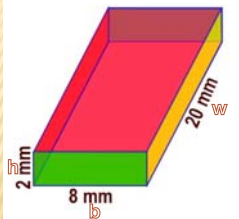
---

---

---

---

**SURFACE AREA OF PRISMS**



$$S.A. = 2bh + 2bw + 2hw$$

$$S.A. = (2 * 8 * 2) + (2 * 8 * 20) + (2 * 2 * 20) = 432 \text{ sq cm}$$

You Try

---

---

---

---

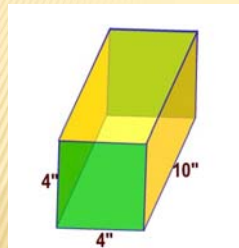
---

---

---

---

**SURFACE AREA OF PRISMS**



You Try

---

---

---

---

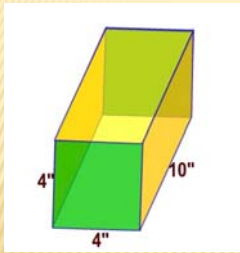
---

---

---

---

**SURFACE AREA OF PRISMS**



Total  
 $32 + 160$   
 $= 192 \text{ sq in}$

De-Construct Shape:

2 Square Bases:  
 $2 * 4 * 4$   
 $= 32 \text{ sq in}$   
 4 Lateral Faces  
 $4 * 4 * 10$   
 $= 160 \text{ sq in}$

You Try

---

---

---

---

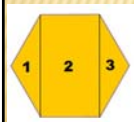
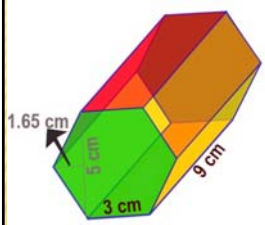
---

---

---

---

**SURFACE AREA OF PRISMS**



You Try

---

---

---

---

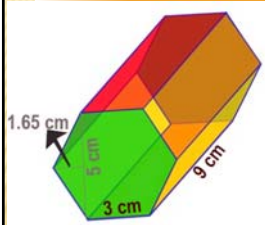
---

---

---

---

**SURFACE AREA OF PRISMS**



Total  
 $46.5 + 162$   
 $= 208.5 \text{ sq. cm.}$

De-Construct Shape:

2 Hexagonal Bases:  
 $2 * [(3 * 5) + 2 * (\frac{1}{2} * 5 * 1.65)]$   
 $= 46.5 \text{ sq. cm.}$   
 6 Lateral Faces  
 $6 * 9 * 3$   
 $= 162 \text{ sq. cm.}$

You Try

---

---

---

---

---

---

---

---