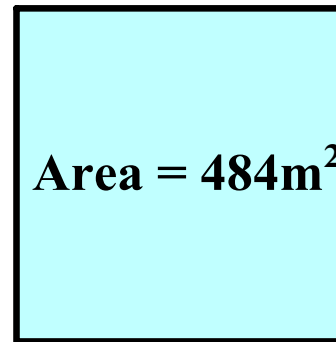


How are you doing?

# Warm Up Questions

1. Determine the *Greatest Common Factor* of 220 & 860.
2. Determine the *Least Common Multiple* of 60 & 230.
3. Determine the side length of the square.



4. A cube has a volume of  $2744\text{cm}^3$ . What is the surface area?
5. A cube has a surface area of  $864\text{ m}^2$ . What is the volume.
6. 😊  $\sqrt[4]{1296}$

1. Determine the *Greatest Common Factor* of 220 & 860.

$$220 \rightarrow 2 \times 2 \times 5 \times 11$$
$$860 \rightarrow 2 \times 2 \times 5 \times 43$$

$$\text{GCF } 2 \times 2 \times 5 = 20$$

2. Determine the *Least Common Multiple* of 60 & 230.

$$60 \rightarrow 2 \times 2 \times 3 \times 5 = 2^2 \times 3^1 \times 5^1$$

$$230 \rightarrow 2 \times 5 \times 23 = 2^1 \times 5^1 \times 23^1$$

$$2^2 \times 3^1 \times 5^1 \times 23$$

$$4 \times 3 \times 5 \times 23$$

$$\text{LCM} = 1380$$

3. Determine the side length of the square.

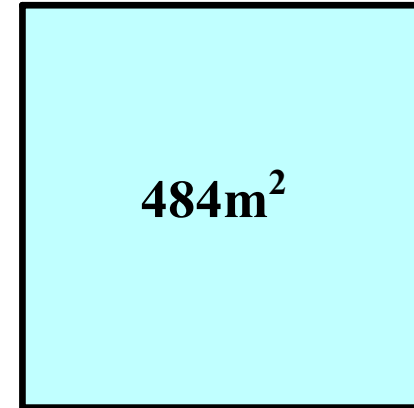
$$\sqrt{484}$$

$$2 \times 2 \times 11 \times 11$$

$$2 \times 11$$

$$22$$

?



?

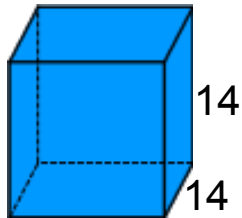
4. A cube has a volume of  $2744\text{cm}^3$ . What is the surface area?

$$\sqrt[3]{2744}$$

$$2 \times 2 \times 2 \times 7 \times 7 \times 7$$

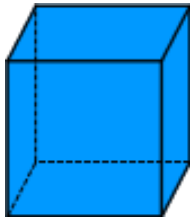
$$2 \times 7$$

$$14$$



$$\begin{aligned} A &= L \times W \\ &= 14 \times 14 \\ &= 196 \text{ x 6 sides} \\ &= 1176 \text{ cm}^2 \end{aligned}$$

5. A cube has a surface area of  $864 \text{ m}^2$ . What is the volume.

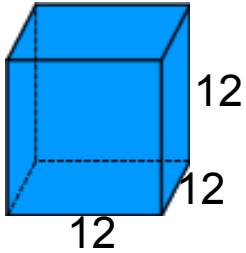


$$\frac{864}{6} = 144$$

144

$$\begin{aligned} \sqrt{144} &= 2 \times 2 \times 2 \times 2 \times 3 \times 3 \\ &= 2 \times 2 \times 3 \\ &= 12 \end{aligned}$$

~~$6(l \times w)$~~   
 $\uparrow$   
 ?  
 $12$   
 $144$   
 $12$



$$\begin{aligned} V &= L \times W \times H \\ &= 12 \times 12 \times 12 \\ &= 1728 \text{ m}^3 \end{aligned}$$



6.  $\sqrt[4]{1296}$

$= 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 3$

$= 2 \times 3$

$= 6$

