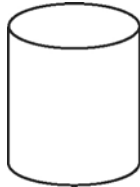
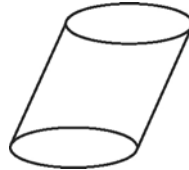


Identifying Right Cylinders and Right Prisms

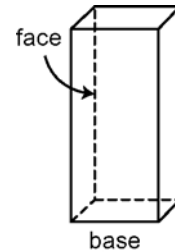
Right prisms and right cylinders have lateral **faces** that meet the **base** at 90° .



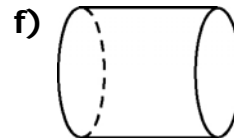
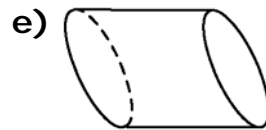
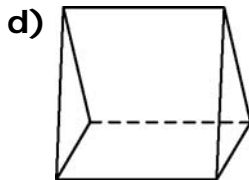
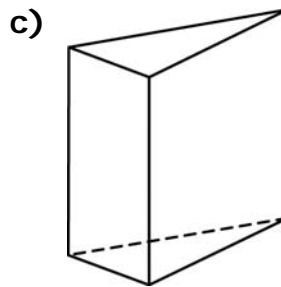
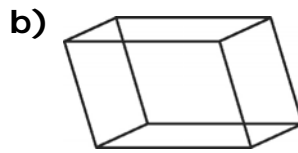
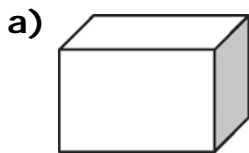
This is a right cylinder.



This is not a right cylinder.



1. Identify the right prisms and right cylinders. Explain how you know.



Use Mental Math

Mental mathematics includes estimating answers mentally. When asked to estimate, give an approximate but carefully thought-out answer.



To estimate 58×3.7 , use numbers that are easy to work with.

$50 \times 3 = 150$ Use front-end estimation.

$60 \times 4 = 240$ Use relative size estimation.

$60 \times 3 = 180$ Round one up and the other down.

The answer to 58×3.7 is between 150 and 240.

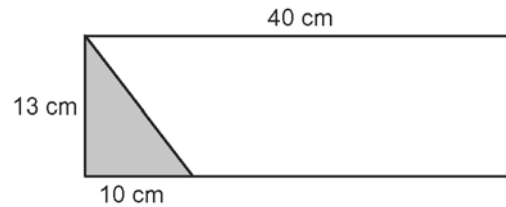
2. Estimate each answer. Show your thinking.

a) 7.6×24 b) 96×8.1 c) 2.9×68

Calculating Area

Area measures the region inside a two-dimensional space.

This rectangle has a shaded triangle.
What is the area of the remaining part of the rectangle?



$$\begin{aligned} \text{Area of rectangle} &= l \times w \\ A &= 40 \times 13 \\ A &= 520 \end{aligned}$$

The area of the rectangle is 520 cm².

$$\begin{aligned} \text{Area of triangle} &= (b \times h) \div 2 \\ A &= (10 \times 13) \div 2 \\ A &= 130 \div 2 \\ A &= 65 \end{aligned}$$

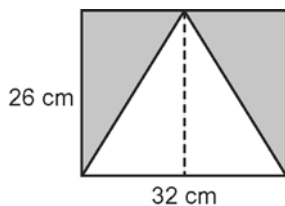
The area of the triangle is 65 cm².

$$\begin{aligned} \text{Area of unshaded region} &= \text{Area of rectangle} - \text{Area of triangle} \\ A &= 520 - 65 \\ A &= 455 \end{aligned}$$

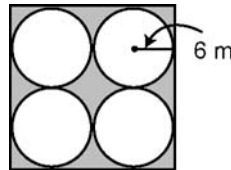
The area of the unshaded region is 455 cm².

3. Calculate the area of each shaded region.

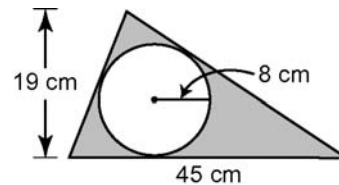
a)



b)



c)



Repeated Multiplication

6^2 can be written as 6×6 .

$$6^2 = 6 \times 6$$

{repeated multiplication}

$$= 36$$

6^2 is read as
"6 squared" or
"6 to the power of 2".

2^3 can be written as $2 \times 2 \times 2$.

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

$$= 8$$

2^3 is read as
"2 cubed" or
"2 to the power of 3".

4. Write as repeated multiplication, then calculate each answer.

a) 4^3 b) 3^5 c) 7^2 d) 5^4

5. Is 3^4 the same as 4^3 ? Justify your response.