## Perimeter and Area

## Subtopic: Area of a Parallelogram

## Section 1

1 Mark T for True and F for False.
la A parallelogram can be converted into a rectangle of equal area.


1b Parallelograms have equal areas and equal perimeters always. $\square$
1c Area of a parallelogram = base X height.


2 Choose the correct answer.
Find the area of the parallelogram in the figure by counting squares. The area is

a) $20 \mathrm{~cm}^{2}$
b) $25 \mathrm{~cm}^{2}$
c) $15 \mathrm{~cm}^{2}$
d) $10 \mathrm{~cm}^{2}$

## Section 2

3 Fill in the blanks.
The area of a parallelogram $A B C D$ with $A B=8 \mathrm{~cm}$ and the perpendicular from $C$ on $A B$ is 4 cm is
$\qquad$


4 Fill the missing values.

| SN | Base | Height | Area of <br> Parallelogram |
| :--- | :--- | :--- | :---: |
| a | 20 cm |  | $200 \mathrm{~cm}^{2}$ |
| b |  | 15 cm | $300 \mathrm{~cm}^{2}$ |
| c |  | 8.4 cm | $48.72 \mathrm{~cm}^{2}$ |
| d | 15.6 cm |  | $16.38 \mathrm{~cm}^{2}$ |

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## Section 3

5 Find the area and perimeter of both the parallelograms below. What can you infer?


6 cm


6 cm

6 Find the area and perimeter of both parallelograms below. What can you infer?


7 Find the area of the parallelogram below.


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## Section 4 : Think and answer the questions below.

$8 D L$ and $B M$ are the heights on sides $A B$ and $A D$, respectively, of parallelogram $A B C D$. If the area of the parallelogram is $1050 \mathrm{~cm} 2, A B=35 \mathrm{~cm}$ and $A D=50 \mathrm{~cm}$, find the length of $B M$ and $D L$.


9 PQRS is a parallelogram. QM is the height from $Q$ to $S R$ and $Q N$ is the height from $Q$ to $P S$. If $S R=10 \mathrm{~cm}$ and $Q M=7.6 \mathrm{~cm}$. Find: (a) the area of the parallelogram $P Q R S$, (b) QN , if $\mathrm{PS}=8 \mathrm{~cm}$.


10 Manya said that 2 parallelograms with different shapes can have the same area. Is she correct? Give an example.

