

## **SUBJECT: MATHS**

### **Contents:**

#### **Unit 15. Distance, area, and volume**

- ✓ 15.2. The area of a parallelogram and a trapezium (p.336 - 340)
- ✓ 15.3. Calculating the volume of triangular prisms (p. 341 - 346)
- ✓ 15.4. Calculating the surface area of triangular prisms and pyramids (p.346-350)

#### **Unit 16. Interpreting and discussing results**

- ✓ 16.1. Interpreting and drawing frequency diagrams (p.353-360)

### **Instructions:**

- 1) Students **MUST** complete the study guide before revision classes.
- 2) Students are **NOT ALLOWED** to use calculators for problem-solving tasks.

### **PART 1. MATHEMATICAL TERMS**

<b>NO.</b>	<b>TERMS</b>	<b>UNITS</b>	<b>DEFINITIONS</b>	<b>VIETNAMESE TRANSLATIONS</b>
<b>1</b>	<b>parallelogram</b>	15.2		
<b>2</b>	<b>trapezium</b>	15.2		
<b>3</b>	<b>trapezia</b>	15.2		
<b>4</b>	<b>area</b>	15.2		
<b>5</b>	<b>cross-section</b>	15.3		
<b>6</b>	<b>prism</b>	15.3		
<b>7</b>	<b>volume</b>	15.3		
<b>8</b>	<b>net</b>	15.4		
<b>9</b>	<b>surface area</b>	15.4		
<b>10</b>	<b>cube/ cuboid</b>	15.4		

11	<b>frequency diagram</b>	16.1		
12	<b>grouped data</b>	16.1		
13	<b>class</b>	16.1		
14	<b>class interval</b>	16.1		
15	<b>discrete data</b>	16.1		
16	<b>continuous data</b>	16.1		

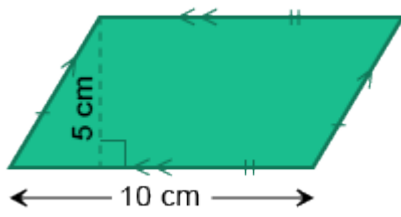
## **PART 2. EXERCISES**

*Please, see the next pages.*

## Study Guide\_Final 2\_Maths 10

20 marks from 20 questions

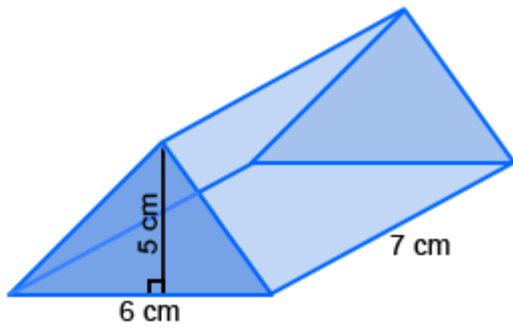
### Question 1



The area of the parallelogram is   $\text{cm}^2$ .

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### Question 2

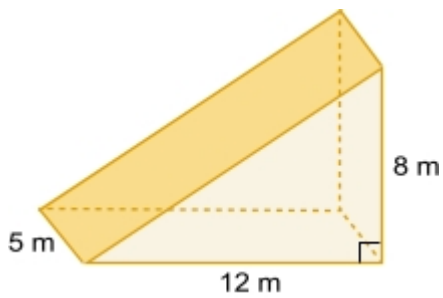


What is the area of the base of this triangular prism?

$\text{cm}^2$

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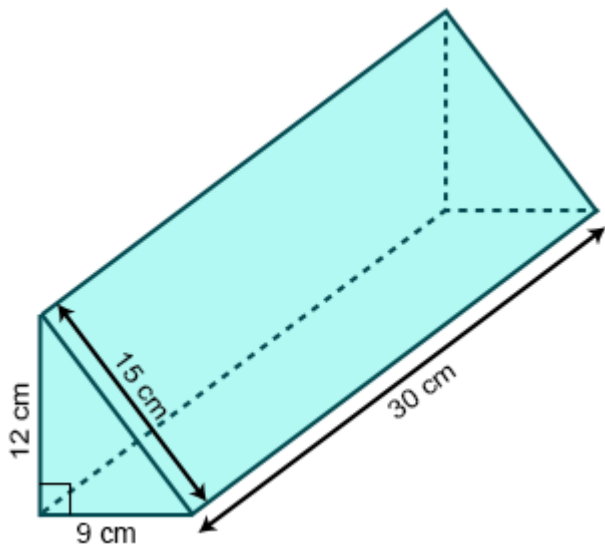
### Question 3



Volume =   $\text{m}^3$

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Question 4

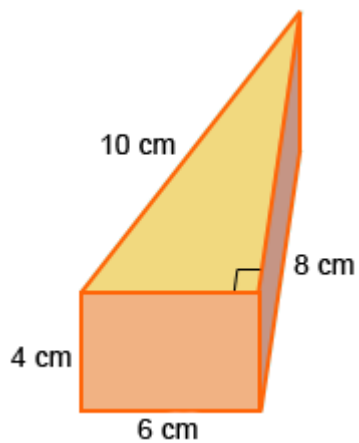


What is the area of each triangular face at the end of this prism?

$\text{cm}^2$

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Question 5

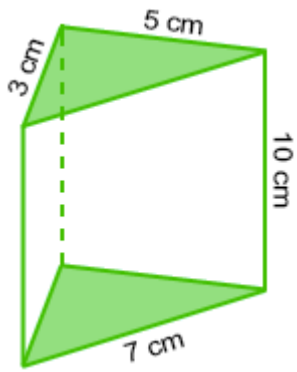


Calculate the area of the triangular face.

Area =   $\text{cm}^2$

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### Question 6

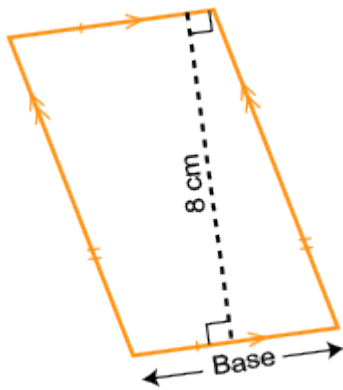


What is the area of each triangular face on this prism?

cm<sup>2</sup>

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### Question 7



The area of the parallelogram is 40 cm<sup>2</sup>.

If the perpendicular height is 8 cm, then the length of the base is:

cm

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### Question 8

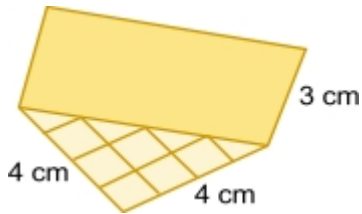
A parallelogram has a base of length 13 cm and a height of 8 cm.

What is the area?

cm<sup>2</sup>

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**Question 9**



The base of this prism is a right-angled triangle. Calculate its volume.

Volume =  cm<sup>3</sup>

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**Question 10**

A parallelogram has a base of length 15.2 cm and a height of 6 cm.

What is the area?

cm<sup>2</sup>

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**Question 11**

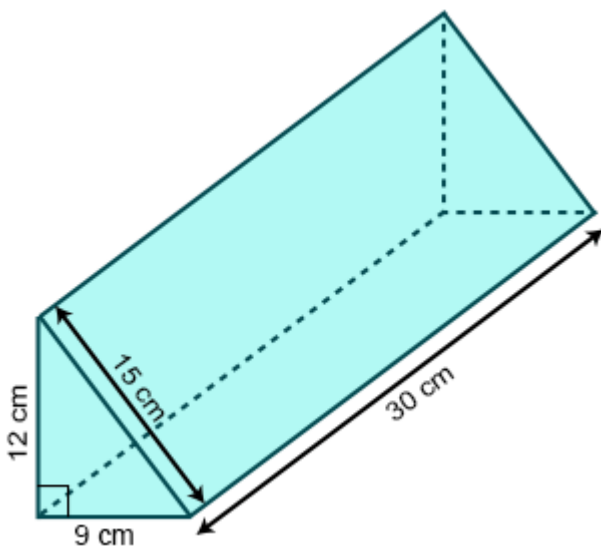
A triangular prism has a base of 5 cm, a height of 12 cm and a length of 3 cm.

What is the volume of the triangular prism?

cm<sup>3</sup>

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**Question 12**

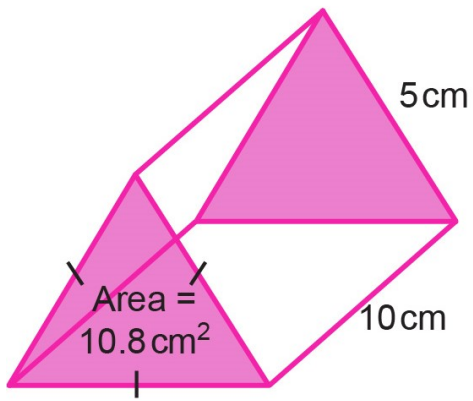


What is the total surface area of this prism?

cm<sup>2</sup>

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Question 13

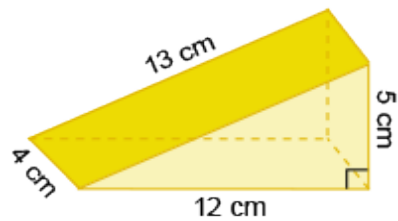


What is the total surface area of the rectangular faces?

cm<sup>2</sup>

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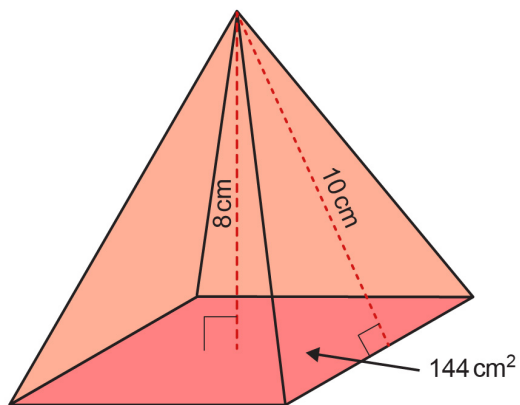
Question 14



Area of the **largest** rectangular face =  cm<sup>2</sup>

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Question 15



The area of the base of a square-based pyramid is 144 cm<sup>2</sup>.

The perpendicular height is 8 cm.

Calculate the surface area of the pyramid.

Surface area =  cm<sup>2</sup>

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### Question 16

A parallelogram has an area of  $72 \text{ cm}^2$ . The height is  $4.5 \text{ cm}$ .

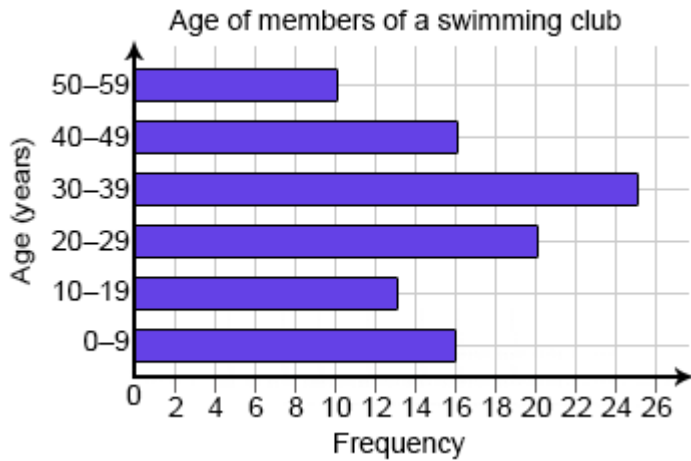
What is the length of the base?

cm

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### Question 17

The bar chart shows the ages of the members of a swimming club.

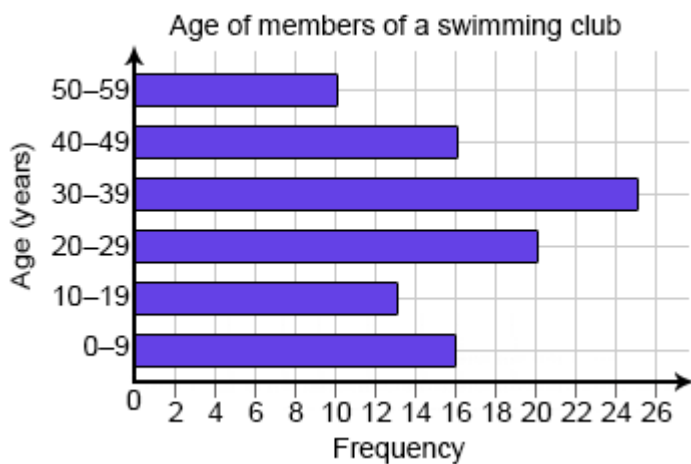


How many members are aged under 20?

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### Question 18

The bar chart shows the ages of the members of a swimming club.



How many more members are aged between 30 and 39 than between 50 and 59?

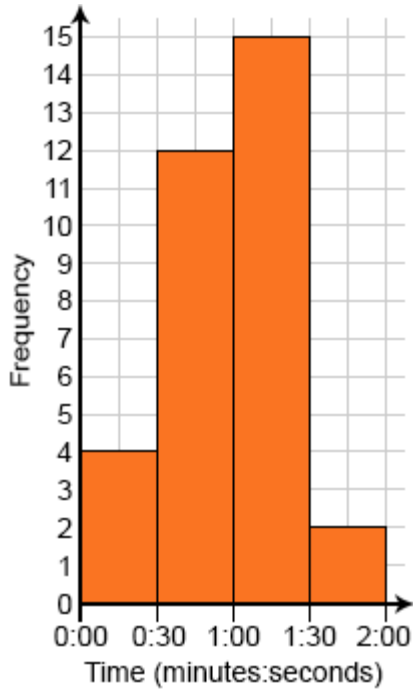
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### Question 19

A group of students timed how long they could hold their breath. Each student's best result was recorded in the frequency diagram.

Time students can hold their breath

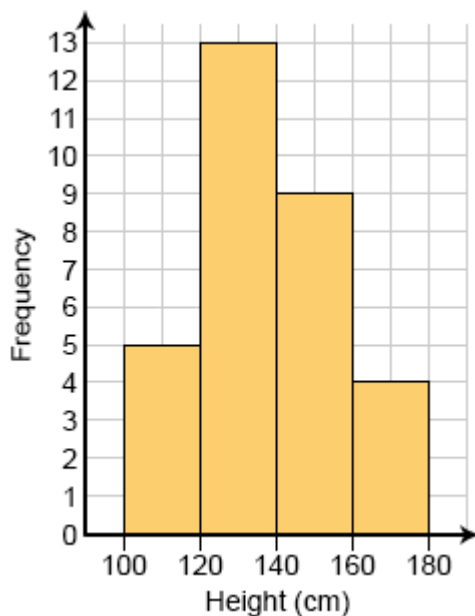


How many more students could hold their breath for longer than one minute than for less than 30 seconds?

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### Question 20

The frequency diagram shows the heights of the learners in a Stage 8 class.



How many learners are less than 1.4 m tall?