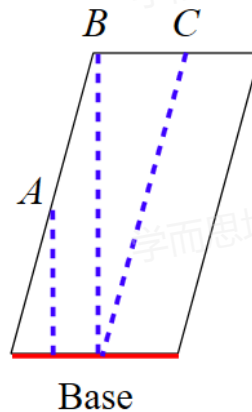


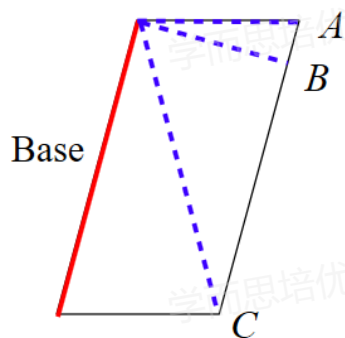
Area of Parallelograms

1 Choose the appropriate height corresponding to the provided base for the following parallelograms.

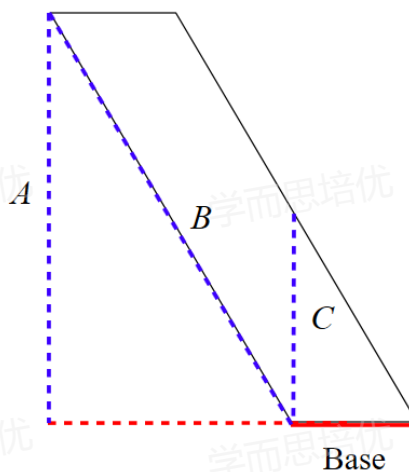
(1)



(2)



(3)



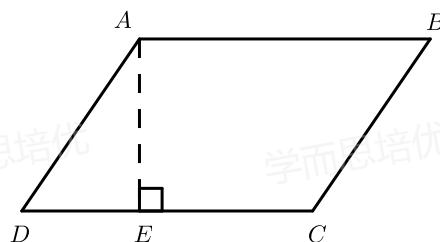
Answer (1) *B*

(2) *B*

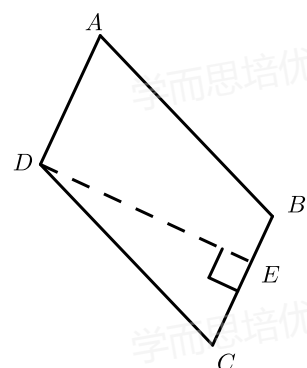
(3) *A*

2 Answer the following questions.

- (1) If AB is 5 cm and AE is 3 cm, the area of parallelogram $ABCD$ is _____ cm^2 .



- (2) If AD is 4 cm and DE is 9 cm, the area of parallelogram $ABCD$ is _____ cm^2 .



Answer (1) 15

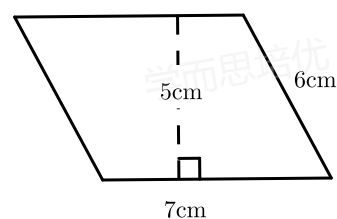
(2) 36

Solution (1) $3 \times 5 = 15 \text{ cm}^2$

(2) $BC = AD = 4 \text{ cm}$

$4 \times 9 = 36 \text{ cm}^2$

3 Find the area of the parallelogram below.

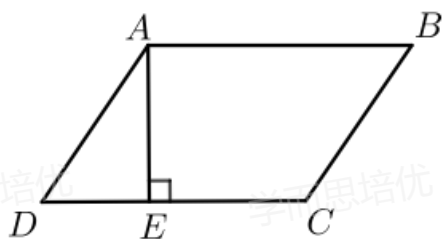


Answer 35

Solution $5 \times 7 = 35$

4

In parallelogram $ABCD$, $\overline{AE}$ is perpendicular to $\overline{DC}$. Knowing that $\overline{AB} = 4.5\text{cm}$ and $\overline{AE} = 2\text{cm}$, the area of the parallelogram $ABCD$ is _____ cm^2 .

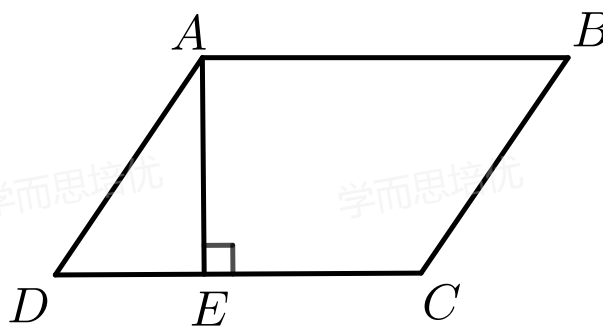


Answer 9

Solution N/A

5

In parallelogram $ABCD$, AE is perpendicular to DC . Given that $ABCD$ has an area of 32cm^2 and $CD = 8\text{cm}$, find the length of AE . _____ cm .

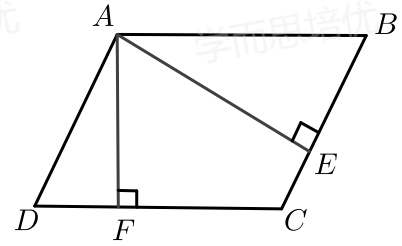


Answer 4

6

It is given that the area of a parallelogram $ABCD$ is 126cm^2 , with $AE = 9\text{cm}$ and $AF = 7\text{cm}$. Find the perimeter of the parallelogram.

Ans: _____ cm

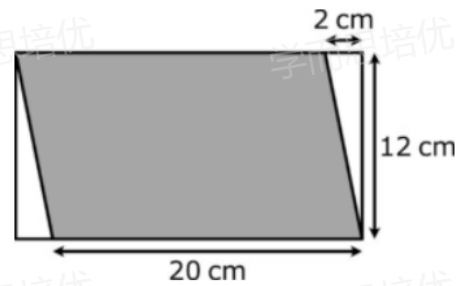


Answer **64**

Solution NA

7 A parallelogram is placed in a rectangle.

What is the area of the parallelogram?



A. 226cm^2

B. 240cm^2

C. 230cm^2

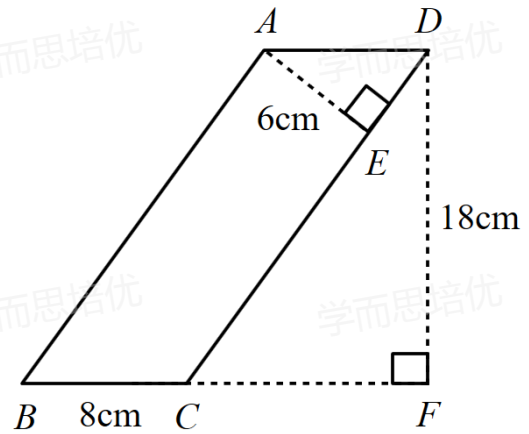
D. 196cm^2

E. 264cm^2

Answer **B**

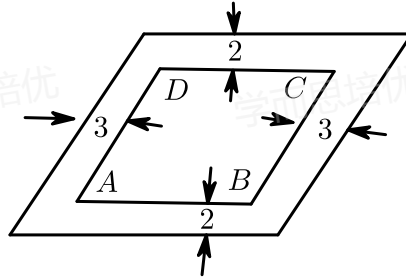
Solution (UK ISEB Pre-test 15 Question 14)

8 The following is a parallelogram. What is the length of CD ? _____ cm



Answer 24

- 9 The figure below illustrates a garden built in the shape of parallelogram $ABCD$. A small road is built around the garden. The relevant information of the small road has been marked in the figure (unit: m). The garden is known to have an area of 456m^2 and AB is 24m long. What is the area of the small road? _____ m^2



Answer 234

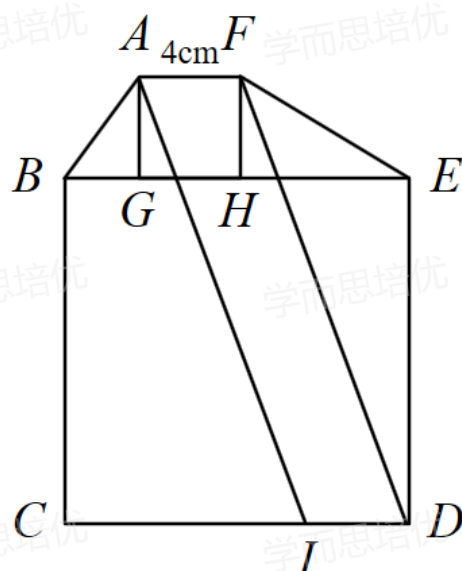
Solution Height of $ABCD = 456 \div 24 = 19\text{m}$

Height of larger parallelogram $= 19 + 2 \times 2 = 23\text{m}$

Base of larger parallelogram $= 24 + 3 \times 2 = 30\text{m}$

Area of road $= 23 \times 30 - 456 = 234\text{m}^2$

- 10 In the following figure, $ABEF$ is a trapezium with an area of 28cm^2 , $AFDI$ is a parallelogram, $AGHF$ and $BCDE$ are both squares. The area of parallelogram $AFDI$ is _____ cm^2 .



Answer 56

Solution Use area formula of trapezium to find BE :

$$(BE + 4) \times 4 \div 2 = 28$$

$$BE = 10$$

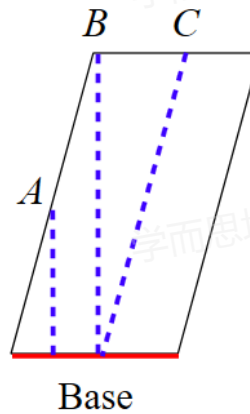
Use area formula of parallelogram:

$$\text{area of parallelogram } AFDI = 4 \times (4 + 10) = 4 \times 14 = 56$$

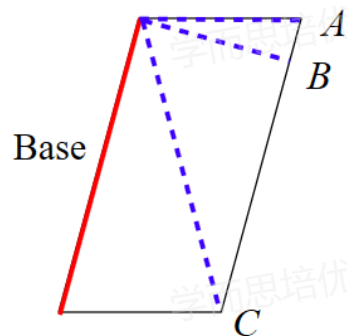
Area of Parallelograms

1 Choose the appropriate height corresponding to the provided base for the following parallelograms.

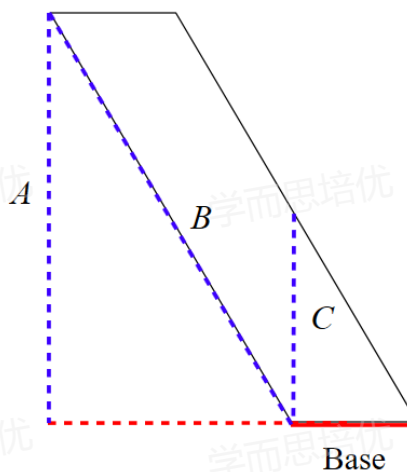
(1)



(2)



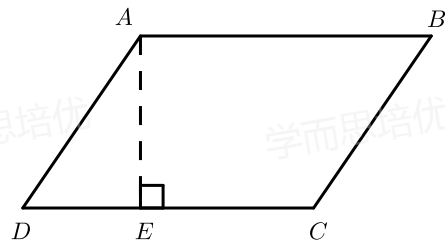
(3)



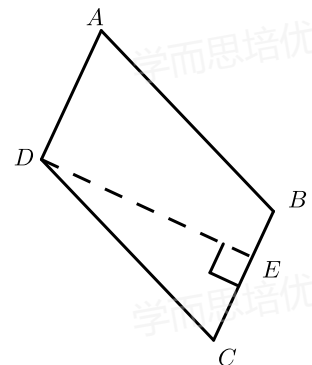
2

Answer the following questions.

- (1) If AB is 5 cm and AE is 3 cm, the area of parallelogram $ABCD$ is _____ cm^2 .

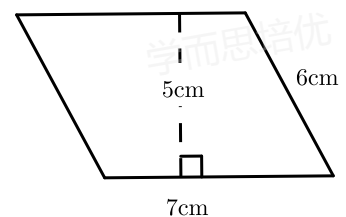


- (2) If AD is 4 cm and DE is 9 cm, the area of parallelogram $ABCD$ is _____ cm^2 .



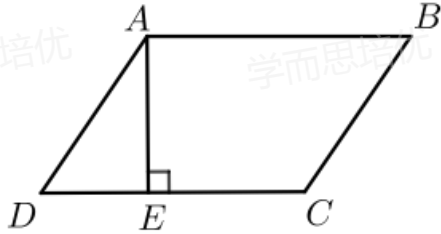
3

Find the area of the parallelogram below.



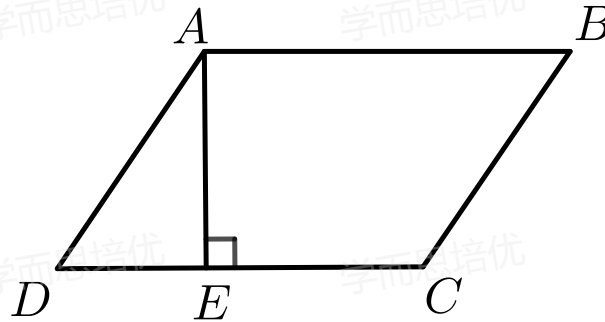
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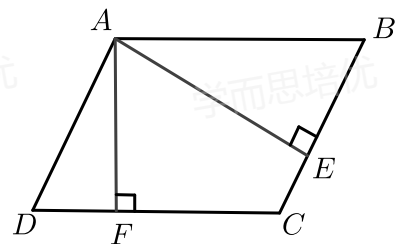


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Find the perimeter of the parallelogram.

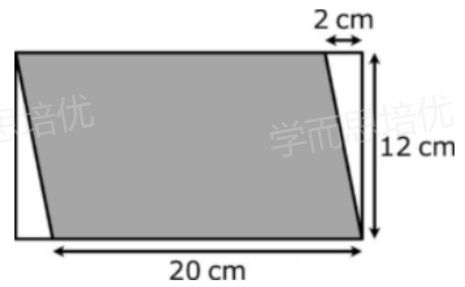
Ans: _____ cm



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A parallelogram is placed in a rectangle.

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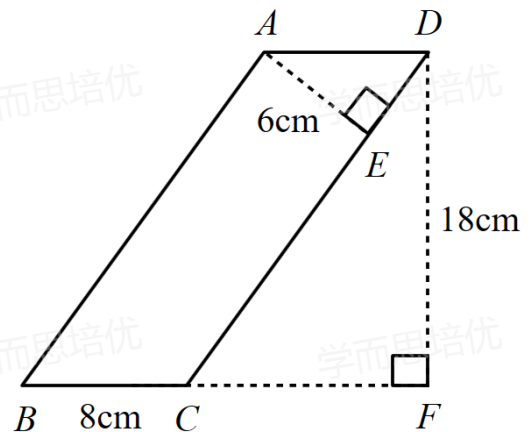
C. 230cm^2

D. 196cm^2

E. 264cm^2

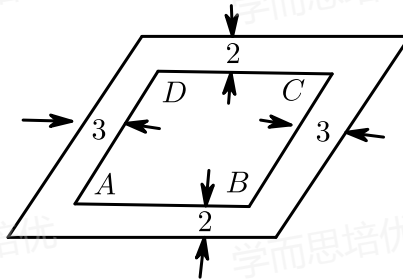
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