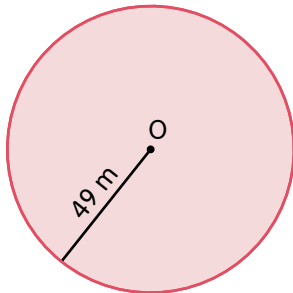


Practice 5 Area of a Circle

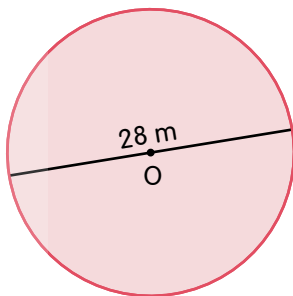
1 For each circle, O is the centre.

Find the area of each circle. (Take $\pi = \frac{22}{7}$)

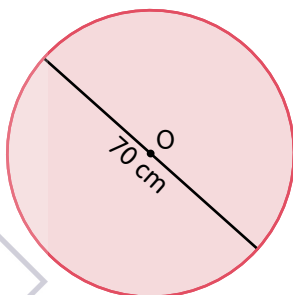
(a)



(b)



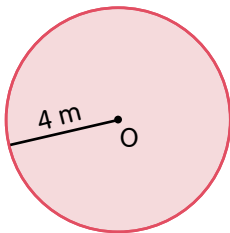
(c)



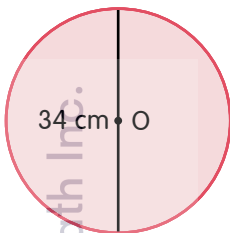


- 2 For each circle, O is the centre.
Find the area of each circle. (Take $\pi = 3.14$)

(a) Radius = 4 m

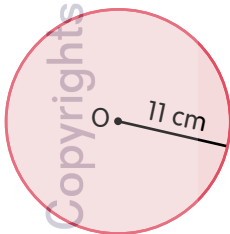


(b) Diameter = 34 cm

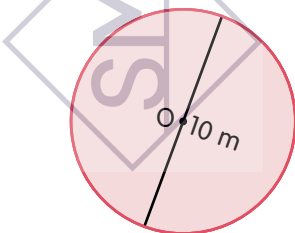


- 3 For each circle, O is the centre.
Find the area of each circle.
Use the value of π in your calculator.
Give your answer correct to 2 decimal places.

(a) Radius = 11 cm

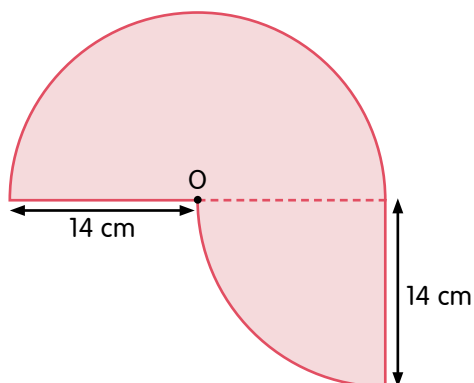


(b) Diameter = 10 m



Practice 7A Area and Perimeter of Composite Figures

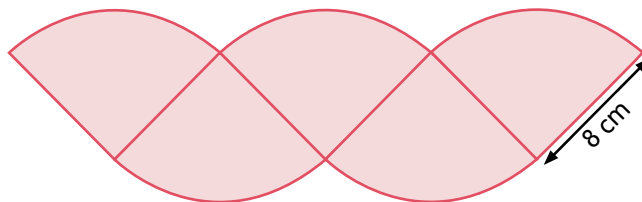
- 1 The figure is made up of a semicircle and a quarter circle. O is the centre of a circle.



- (a) Find the perimeter of the shaded part.
(b) Find the area of the shaded part.

(Take $\pi = \frac{22}{7}$)

- 5 The figure is made up of 5 identical quarter circles.

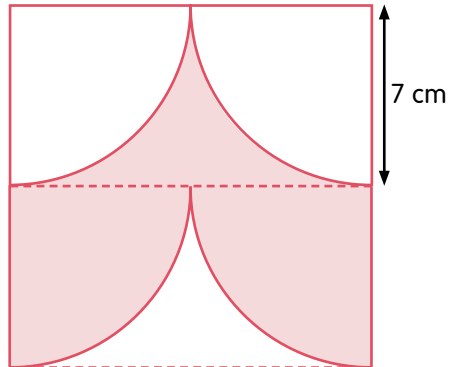


- (a) Find the perimeter of the figure.
(b) Find the area of the figure.
(Take $\pi = 3.14$)



Practice 7B Area and Perimeter of Composite Figures

- 1 Four identical quarter circles are used to form the figure below.

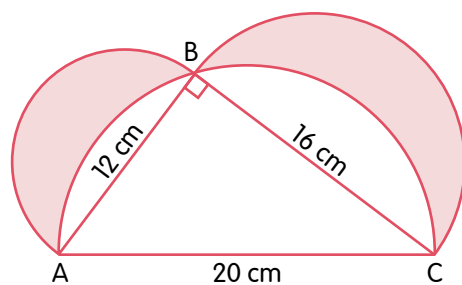


(a) Find the perimeter of the shaded part.

(b) Find the area of the shaded part.

(Take $\pi = \frac{22}{7}$)

- 6 The figure shows 3 semicircles and a right-angled triangle.



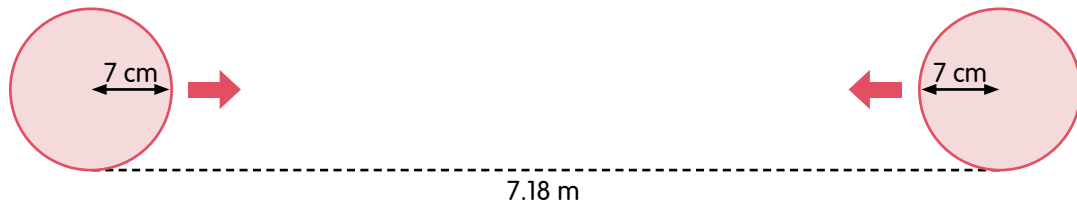
Find the total area of the shaded parts. (Take $\pi = 3.14$)

Name: Class: Date: **Problem Solving**

Two identical wheels that are 7.18 m apart have radius 7 cm each as shown.

They move towards each other. Each wheel takes 2 seconds to make one full turn.

How long will it take for the two wheels to meet if they rotate at the same rate? (Take $\pi = \frac{22}{7}$)

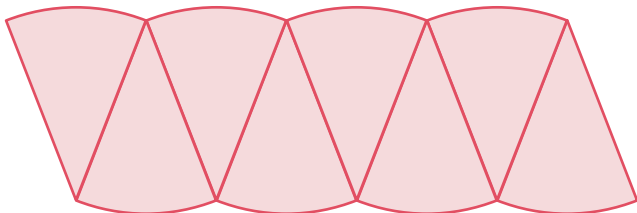


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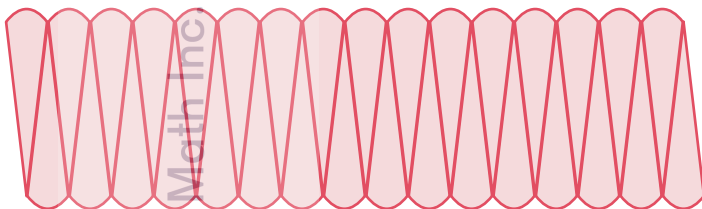


How is the area of a circle related to the area of a rectangles?
Hazel and Daniel do an activity to find out.
Both of them use an identical circle with radius r cm.

Hazel cuts her circle into equal parts and arranges them as shown.



Daniel cuts his circle into equal parts and arranges them as shown.



Whose arrangement will show an area that is closer to the area of the circle?
Explain your answer.



Practice 2 Finding Total Amount

- 1 There are 7 ropes.

The average length of each rope is 5 m.

What is the total length of the ropes?

- 2 There are 16 durians.

The average mass of each durian is 4 kg.

Find the total mass of the durians.

- 3 Joni, Mike and Nathan have some pencils.

The average number of pencils each child has is 6.

Find the total number of pencils the 3 children have.



- 4 There are 8 people in a lift.
The average mass of each person is 58 kg.
What is the total mass of the 8 people?

- 5 The average volume of water in 5 pails is 8.5 ℓ.
What is the total volume of water in the 5 pails?

-  6 The average price of 9 bags is \$38.50.
What is the total price of the 9 bags?



Practice 3 Finding Number of Data Items

- 1 Fill in the number of data items.

Average	Total	Number of data items
35 marbles	840 marbles	bags
12 chicken wings	216 chicken wings	boxes

- 2 The total mass of some papayas is 15 kg.
The average mass of each papaya is 3 kg.
How many papayas are there?

- 3 Kumar filled some containers with 36 ℓ of water altogether.
The average volume of water in each container was 4 ℓ.
How many containers did Kumar fill with water?



- 4 There are different numbers of cookies packed into boxes.
The total number of cookies that are packed is 96.
The average number of cookies in each box is 8.
How many boxes of cookies are there?

- 5 Mr Toh bought some T-shirts for \$85.
The average cost of a T-shirt was \$5.
How many T-shirts did Mr Toh buy?

-  6 The total volume of some containers of water is 540 ℓ.
The average volume of water in each container is 15 ℓ.
How many containers of water are there?



Name:

Class:

Date:

Practice 4 Word Problems

- 1 The average of 4 numbers is 10.6.
Three of the numbers are shown below.

6.6

8.5

11.1

?

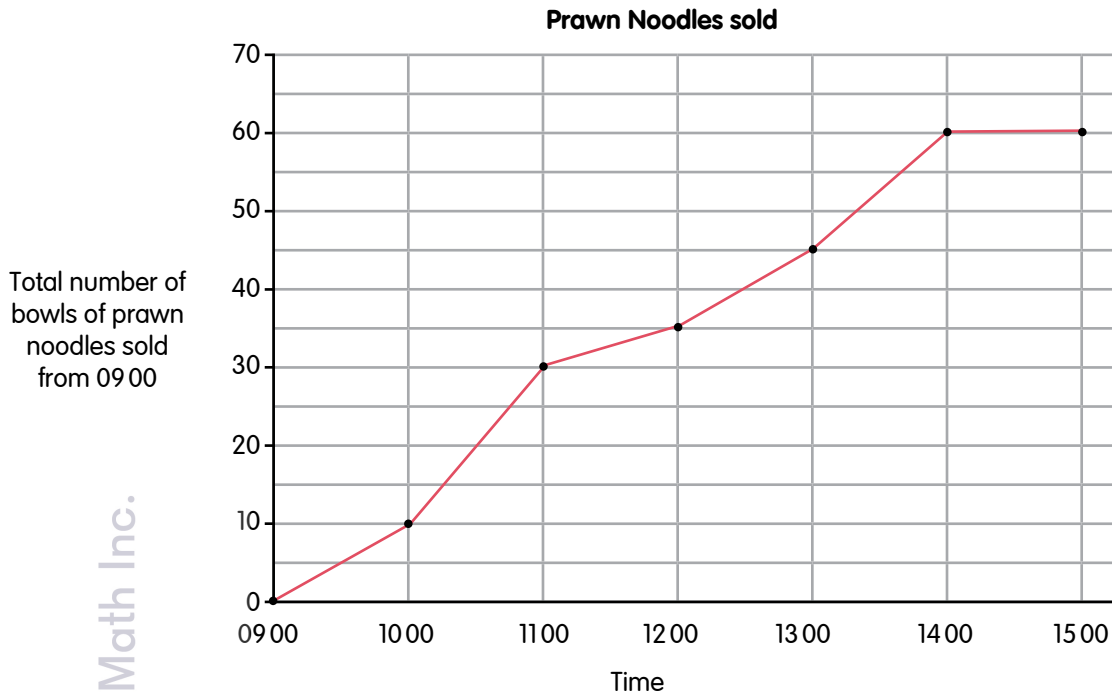
What is the fourth number?

- 2 The average of 5 numbers is 120.
One of the numbers is 160.
What is the average of the other 4 numbers?

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- 7 A hawker sold prawn noodles from 09 00 to 15 00 on Monday.
The line graph shows the total number of bowls of prawn noodles sold from 09 00 to 15 00.



- (a) During which one-hour interval was there no customer?
- (b) During which one-hour interval did the hawker sell the most bowls of prawn noodles?
- (c) What was the average number of bowls of prawn noodles sold each hour from 10 00 to 15 00?

Name:

Class:

Date:

Performance Task



Activity: To discuss and use a suitable length of raffia string to represent the average height of group members.

Work in groups of 5 to 7 students.

Each group will be given a ball of raffia string and a pair of scissors.

Describe how the group can find the average height of the members using the raffia string. Use the raffia string to represent the average height of the group of students.

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