

New Syllabus

# PRIMARY MATHEMATICS

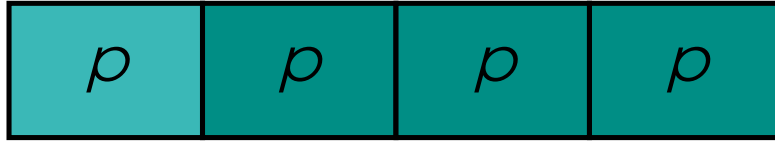
Activity  
Handbook



6

OXFORD  
UNIVERSITY PRESS

# Algebraic Bars



## Evaluation of Algebraic Expressions Cards

$$9 + b = 9 + \square$$
$$= \square$$

$$3c + 15 = 3 \times \square + 15$$
$$= \square + 15$$
$$= \square$$

$$20 - 2d = 20 - 2 \times \square$$
$$= \square \ominus \square$$
$$= \square$$

## Solving Equations Cards

$$\triangle + 12 = 40$$

$$\triangle = \square$$

$$31 - \diamond = 1$$

$$\diamond = \square$$

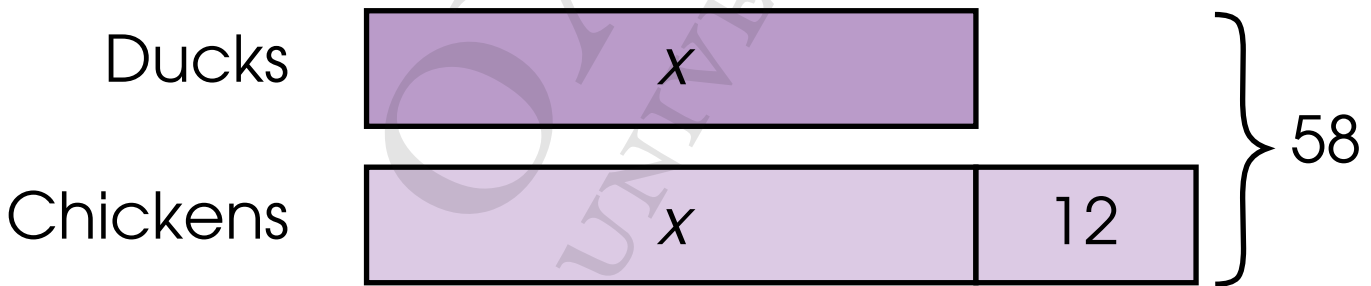
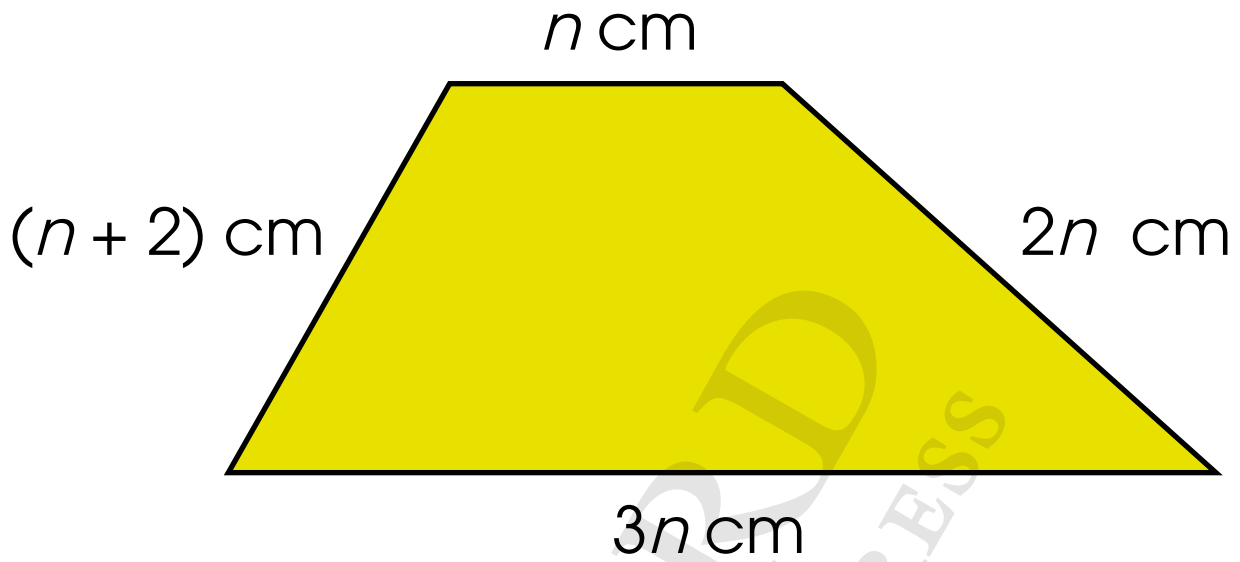
$$9 \times \circ = 27$$

$$\circ = \square$$

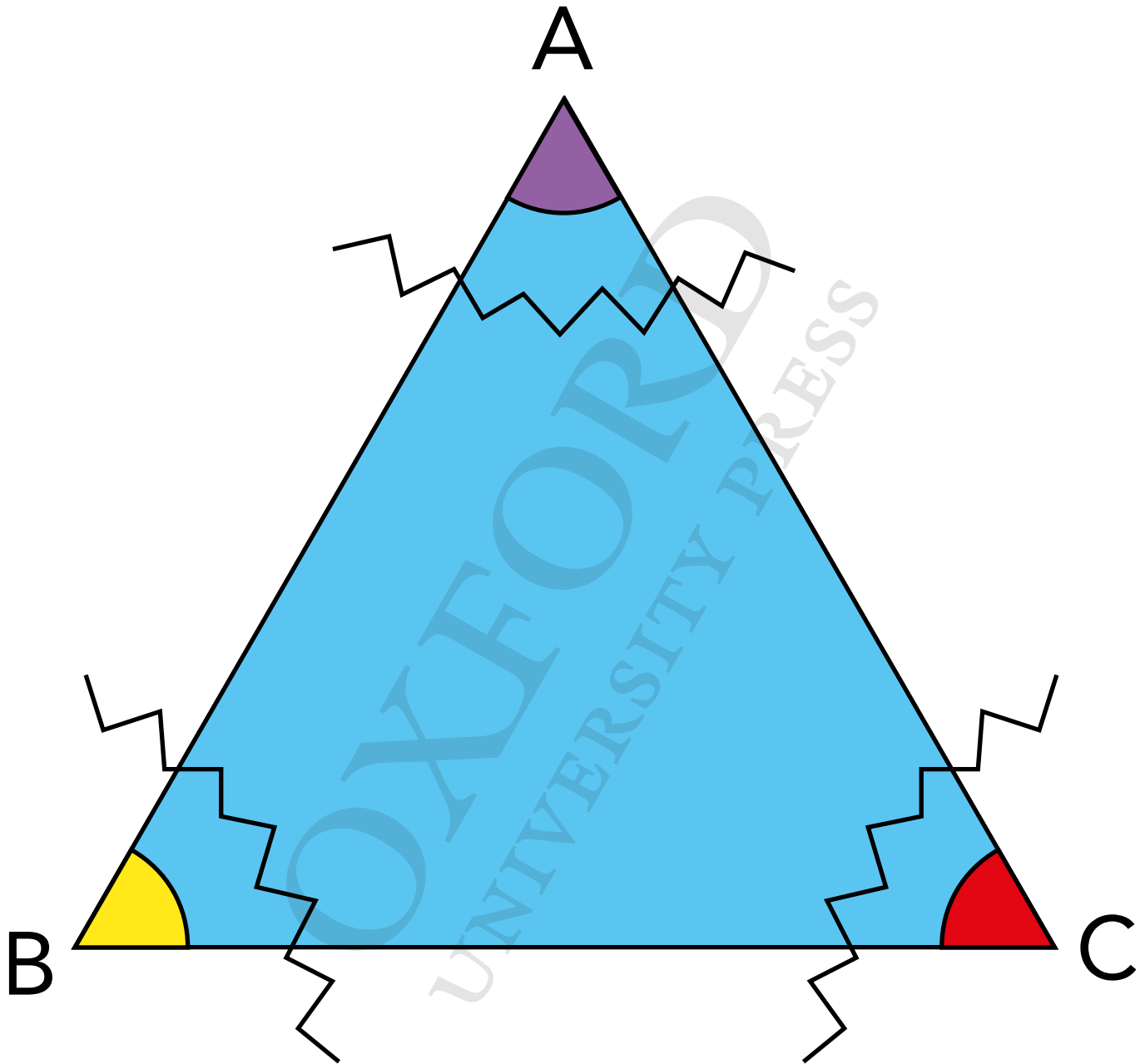
$$24 \div \blacksquare = 3$$

$$\blacksquare = \square$$

# Diagrams for Solving Word Problems



## Triangle (Sum of Angles)



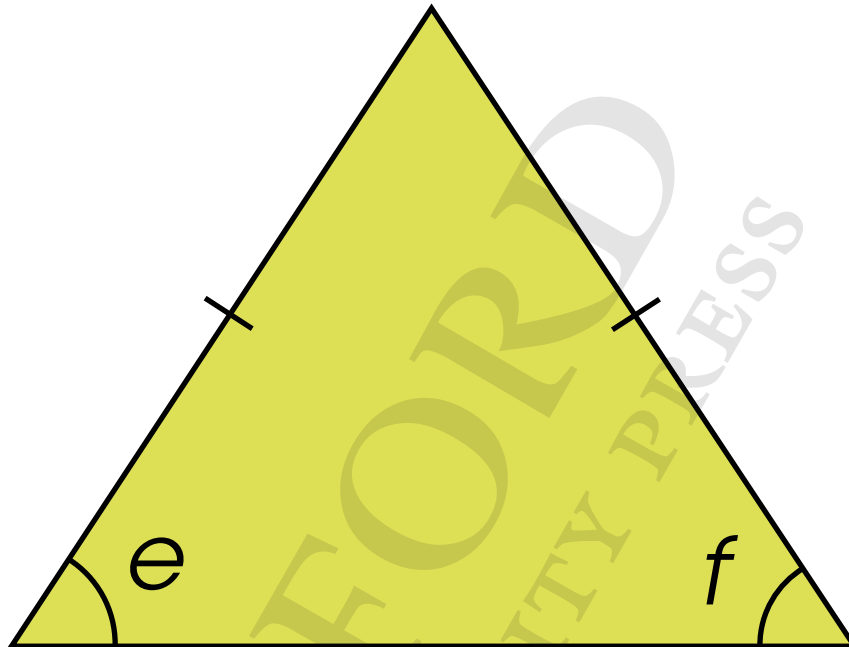
\* Note to teacher:

- Cut out the angles and join them together to form a straight line to show that angles in a triangle add up to  $180^\circ$ .

## Worksheet

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

### Isosceles Triangle



Write down the properties of an isosceles triangle.

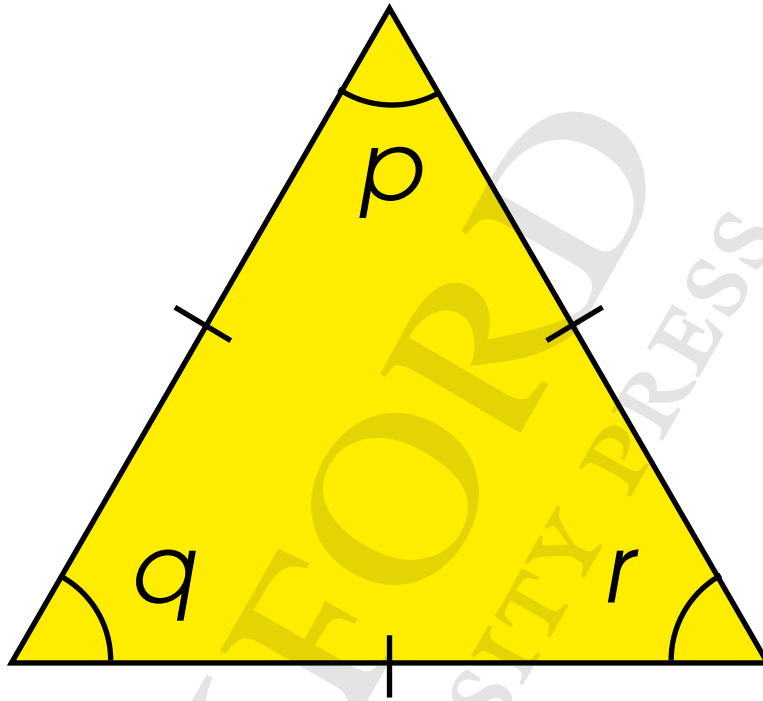
An isosceles triangle...



## Worksheet

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

### Equilateral Triangle



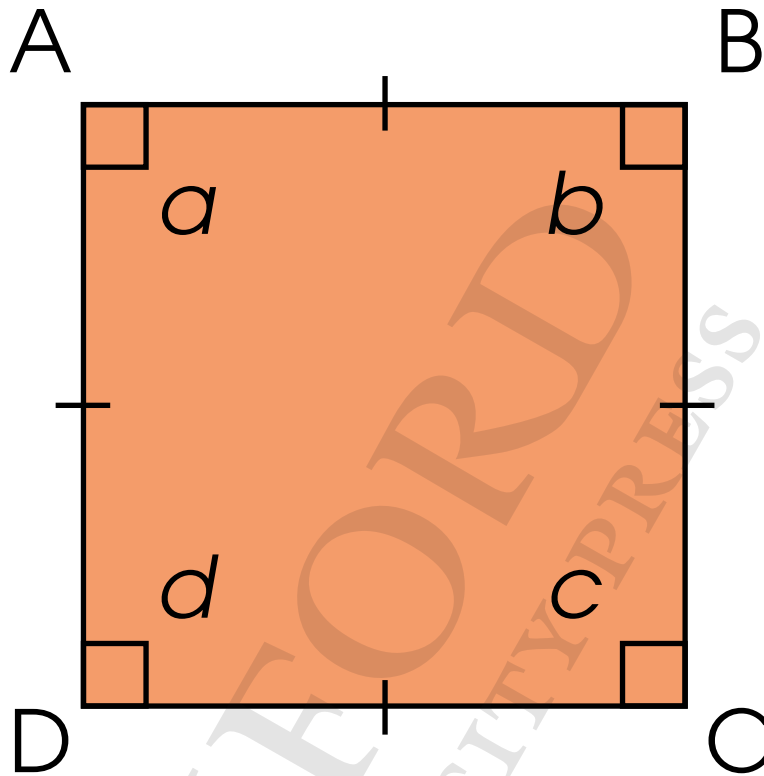
Write down the properties of an equilateral triangle.

An equilateral triangle...

## Worksheet

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## Square



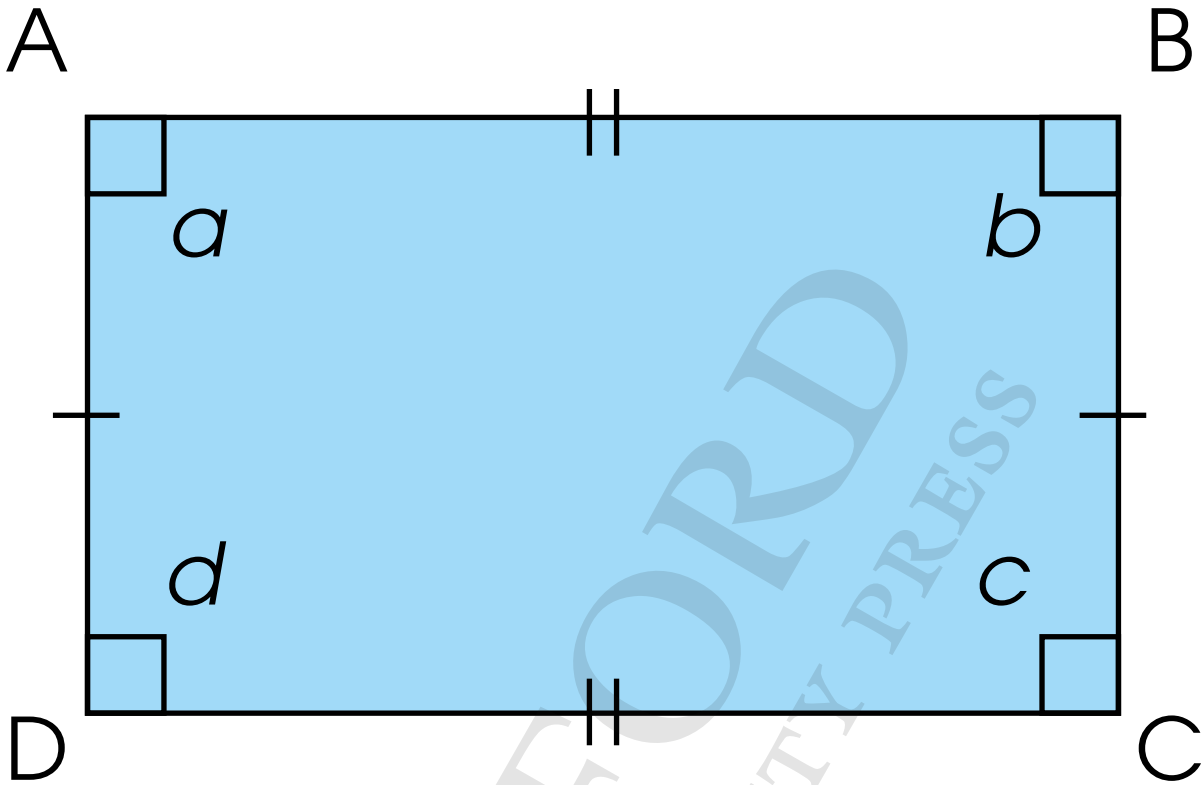
Write down the properties of a square.

A square...

# Worksheet

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## Rectangle



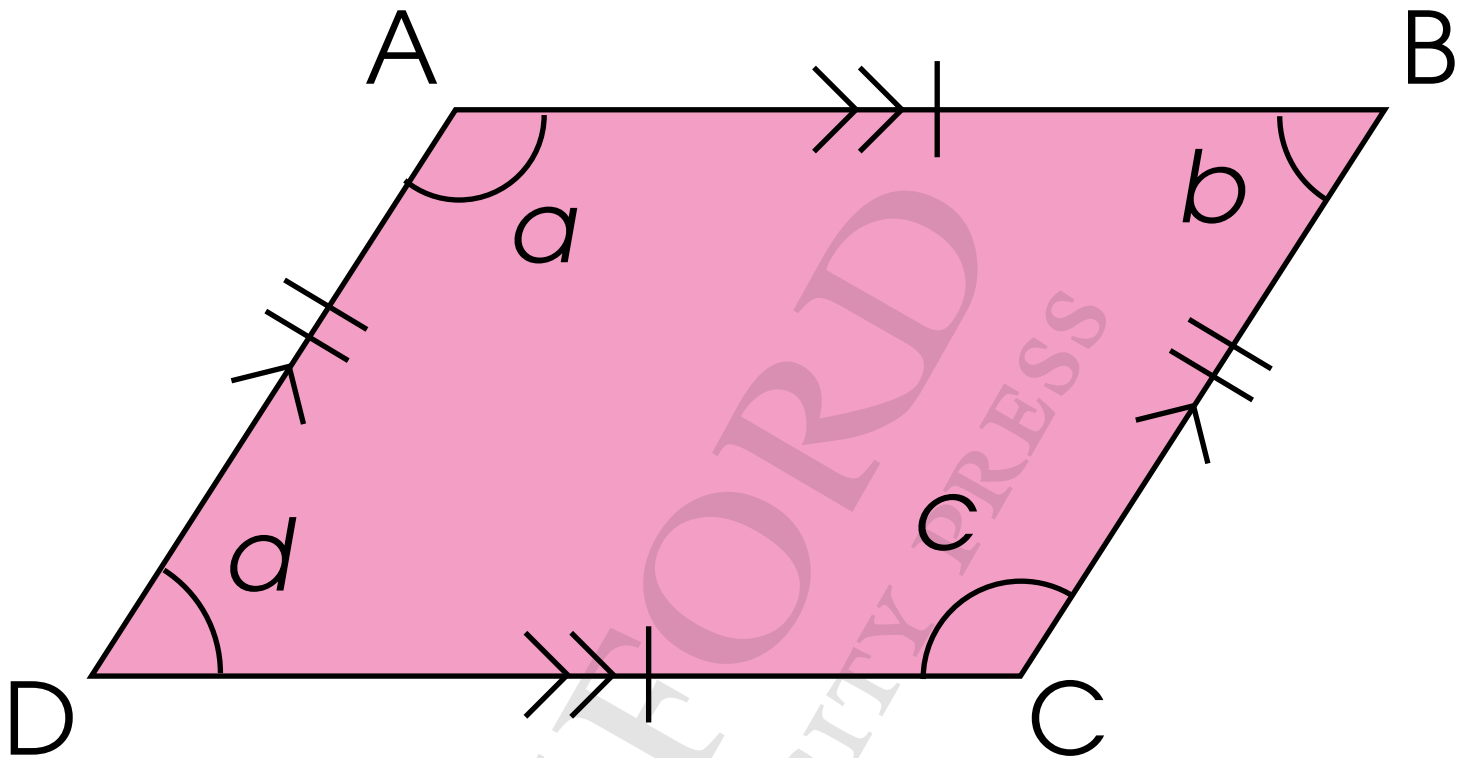
Write down the properties of a rectangle.

A rectangle...

## Worksheet

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

### Parallelogram



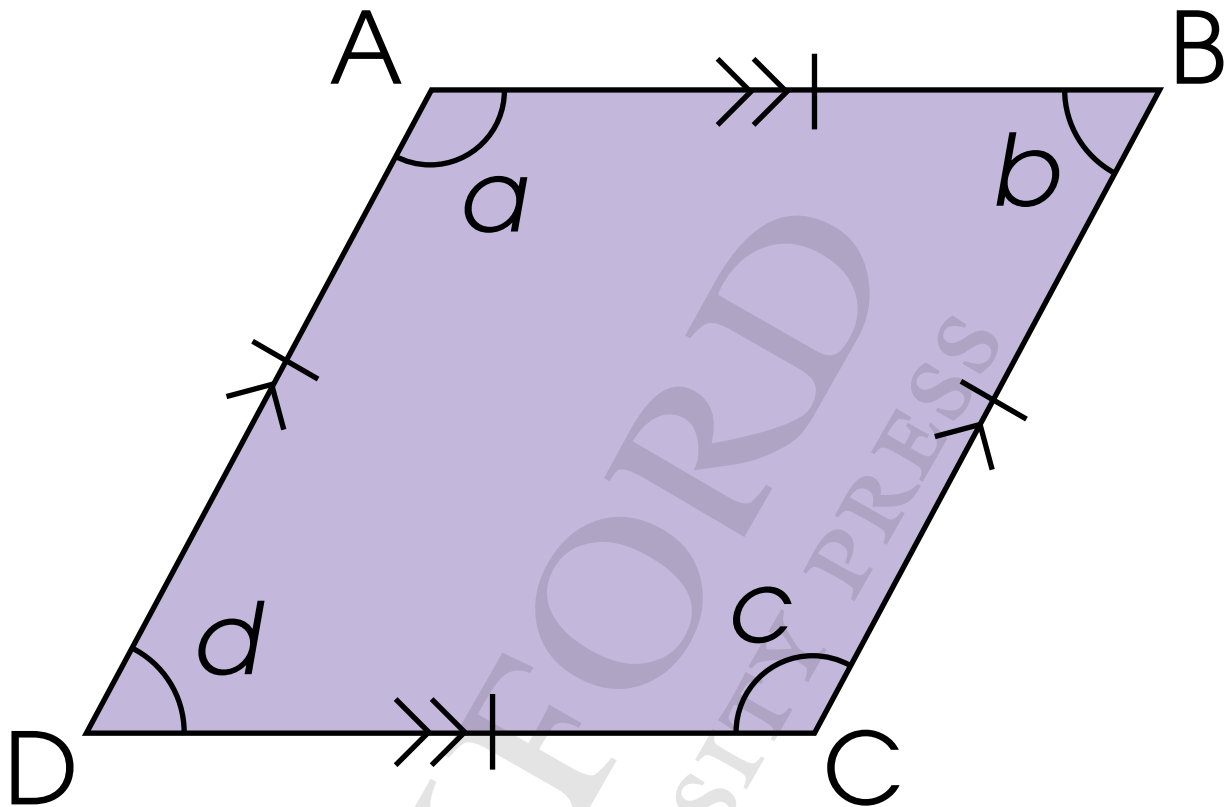
Write down the properties of a parallelogram.

A parallelogram...

## Worksheet

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

### Rhombus



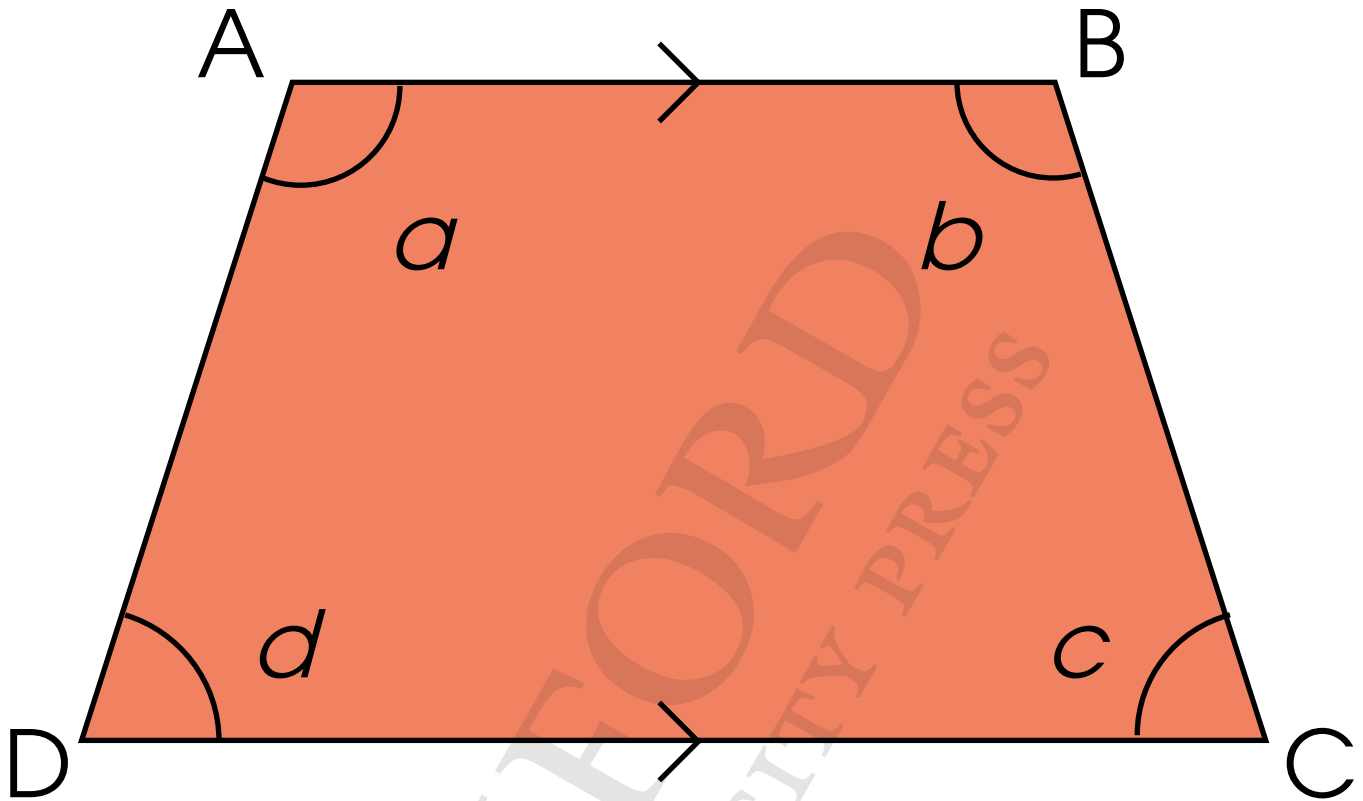
Write down the properties of a rhombus.

A rhombus...

## Worksheet

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

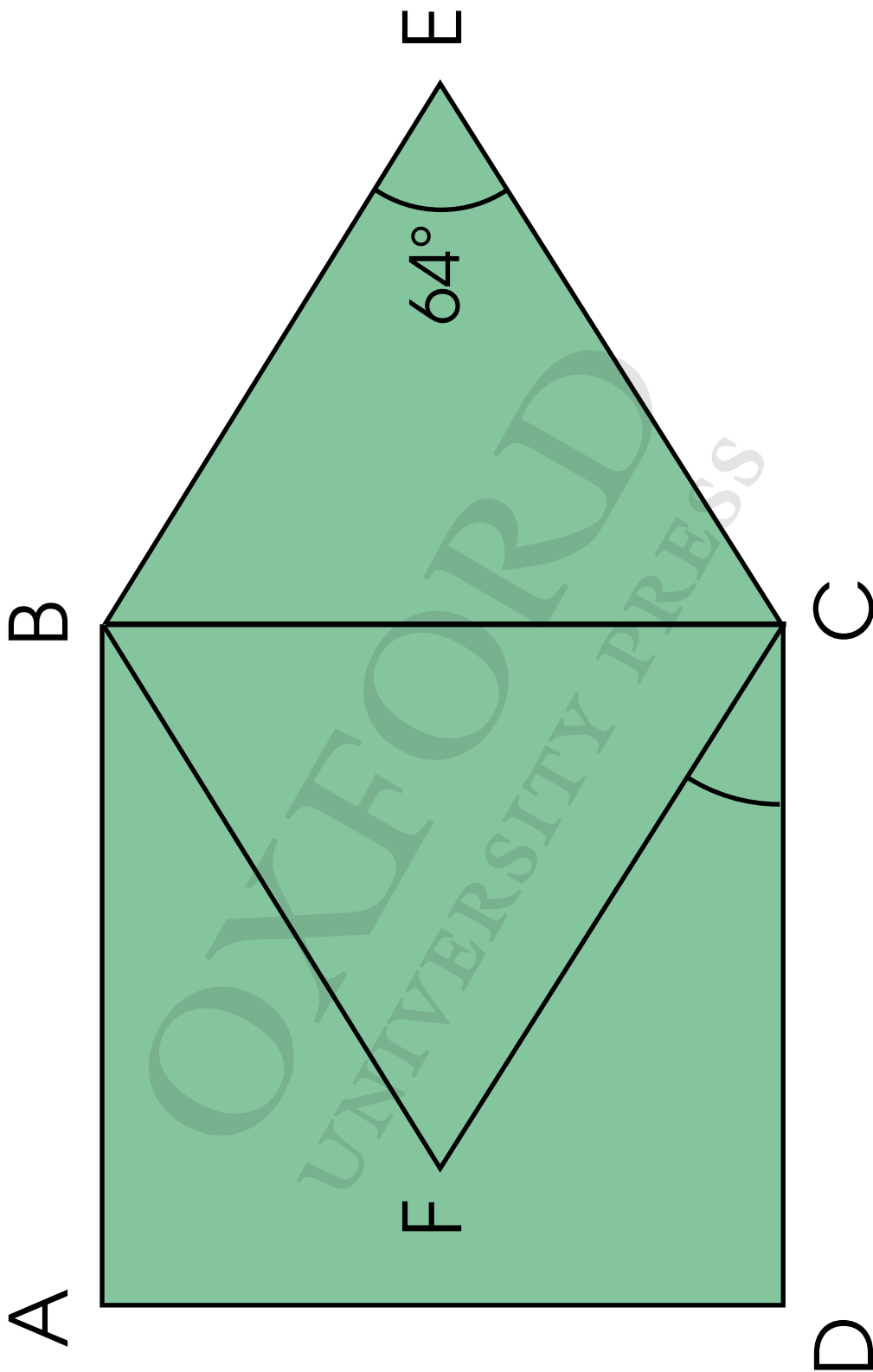
### Trapezium



Write down the properties of a trapezium.

A trapezium...

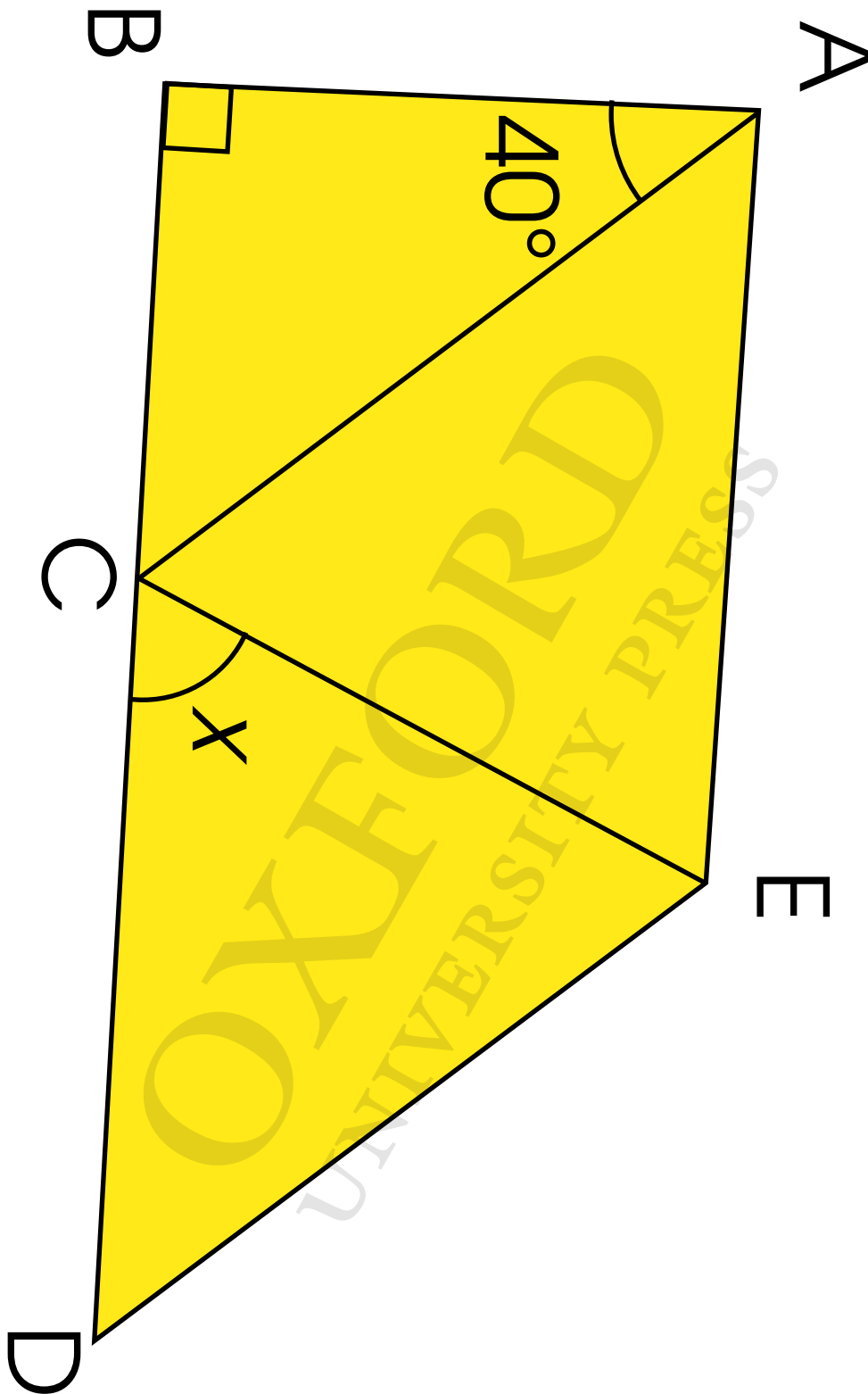
Figure



\* Note to teacher:

- Cut out the figure and laminate it. Provide pupils with the laminated figure and markers to indicate the markings on the figure to show parallel sides and equal sides respectively.

Figure (a)

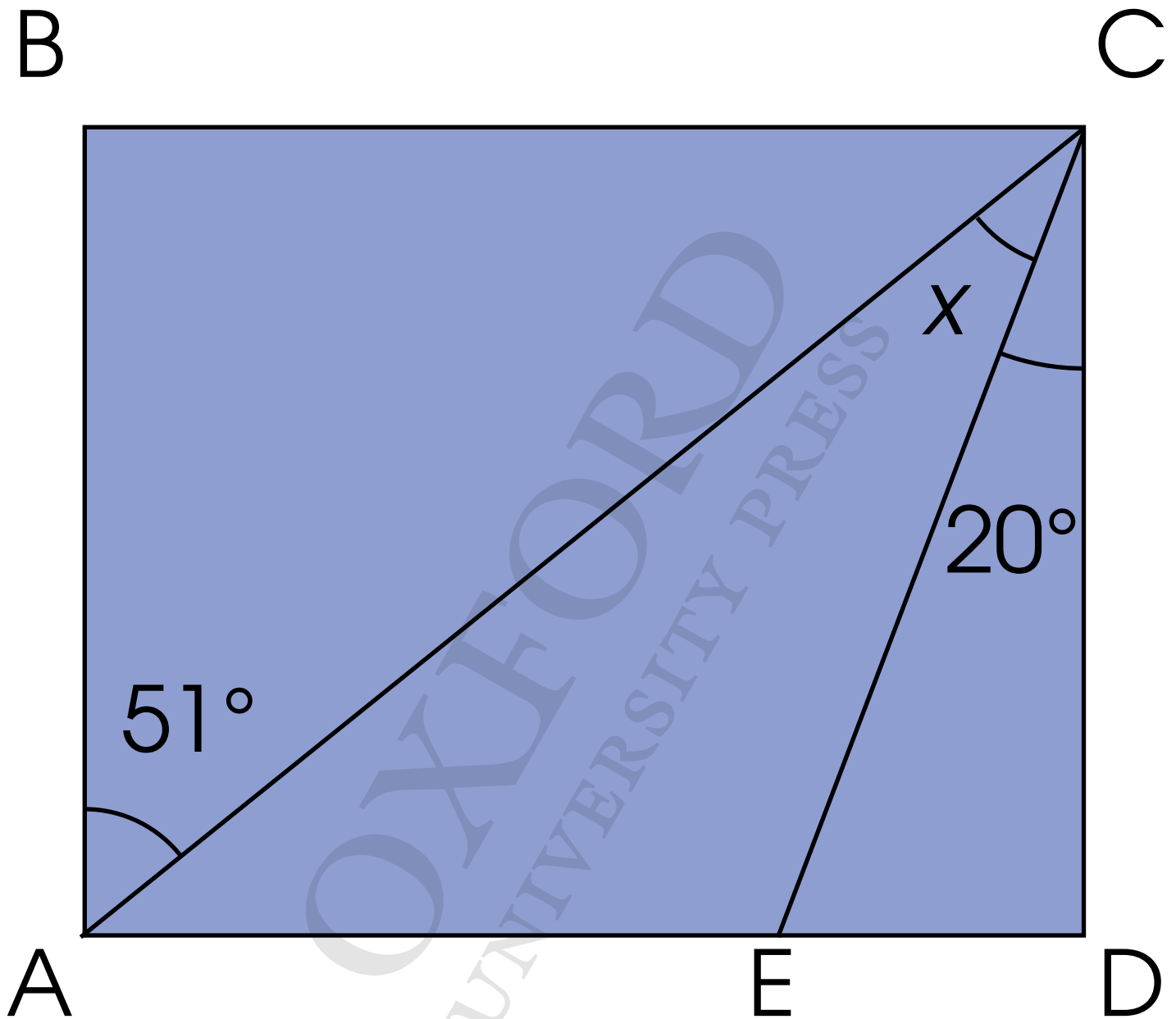


\* Note to teacher:

- Cut out the figure and laminate it for 'Activity Time' (Textbook 6 P28).



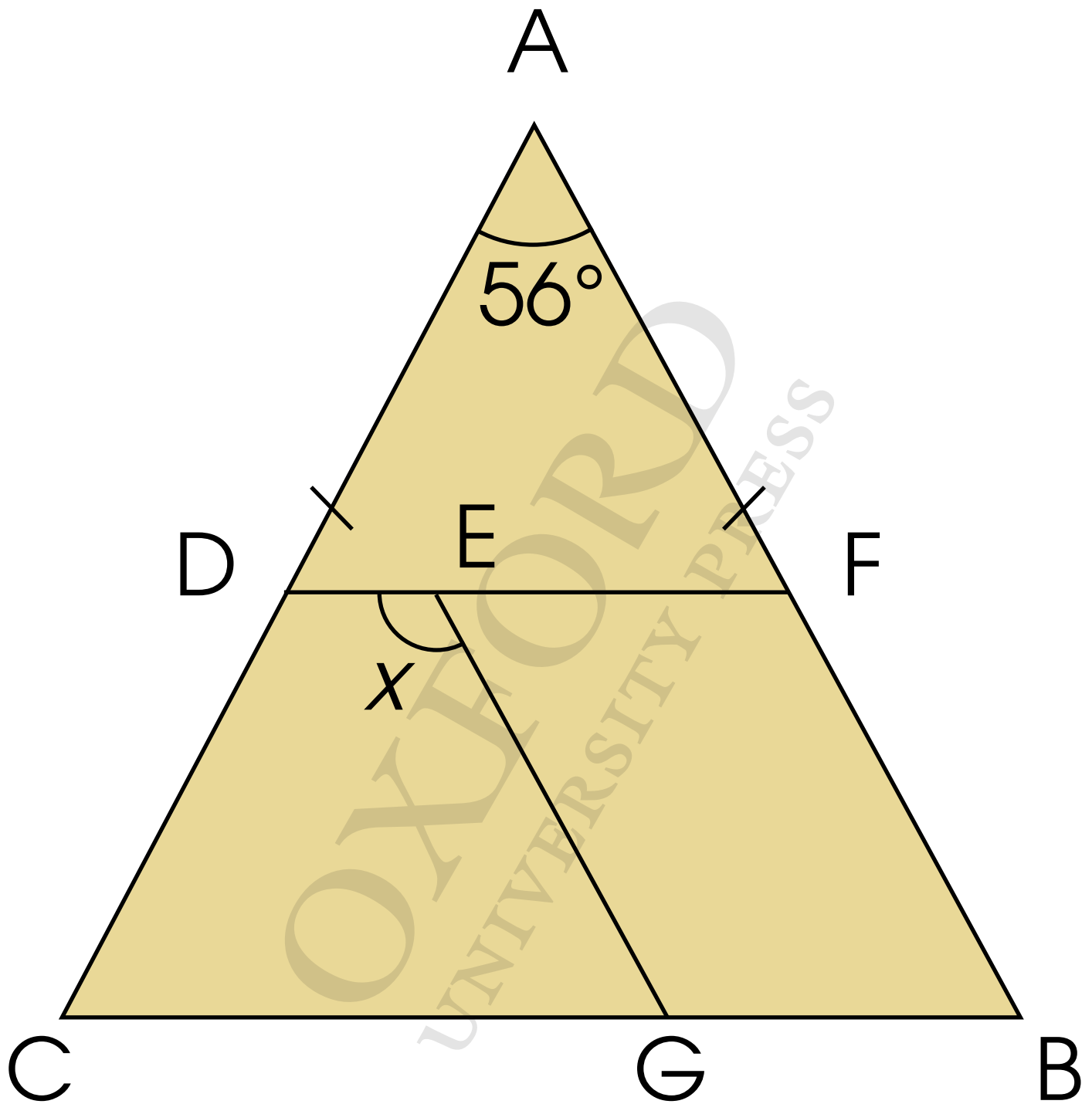
Figure (b)



\* Note to teacher:

- Cut out the figure and laminate it for 'Activity Time' (Textbook 6 P28).

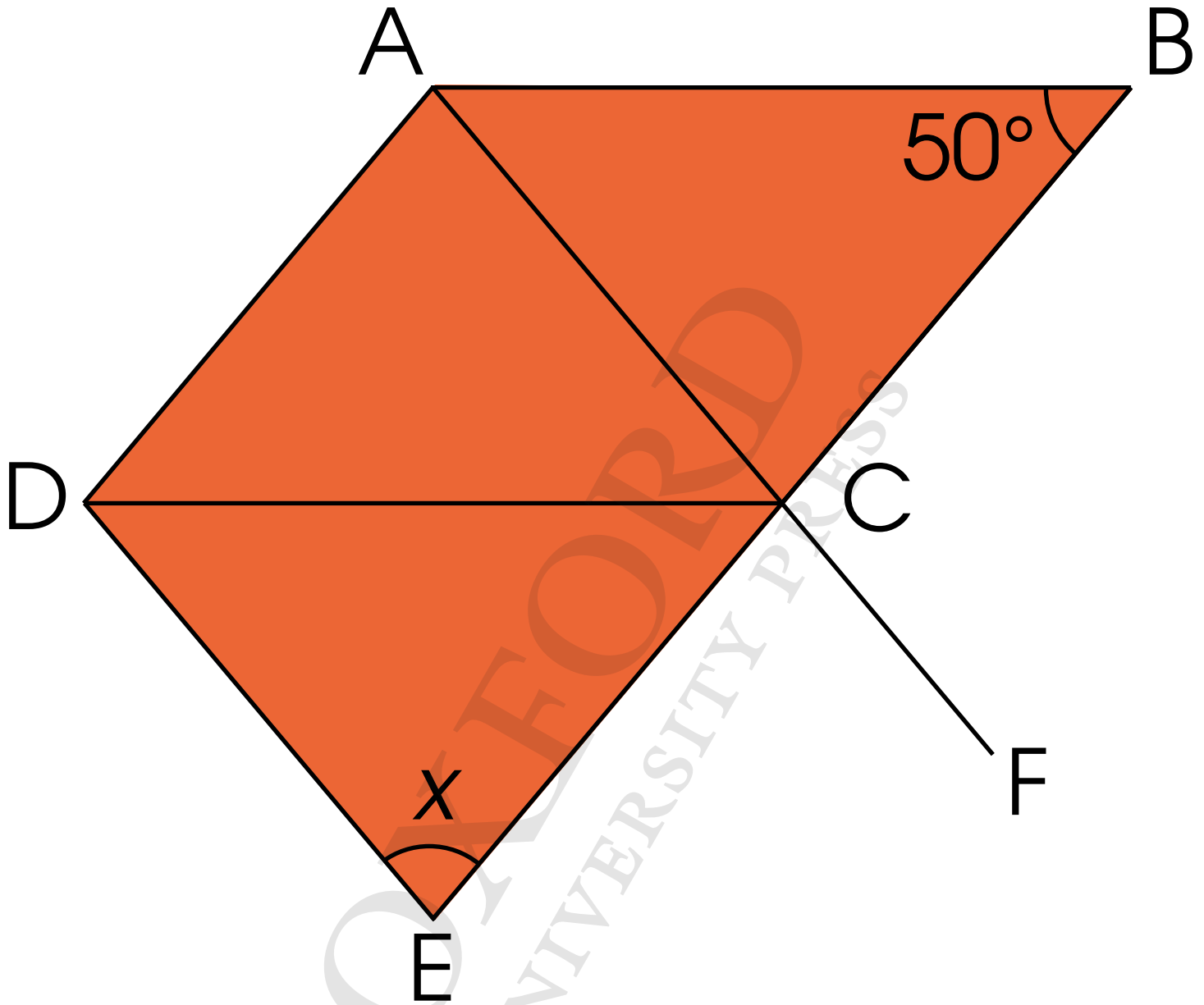
Figure (c)



\* Note to teacher:

- Cut out the figure and laminate it for 'Activity Time' (Textbook 6 P28).

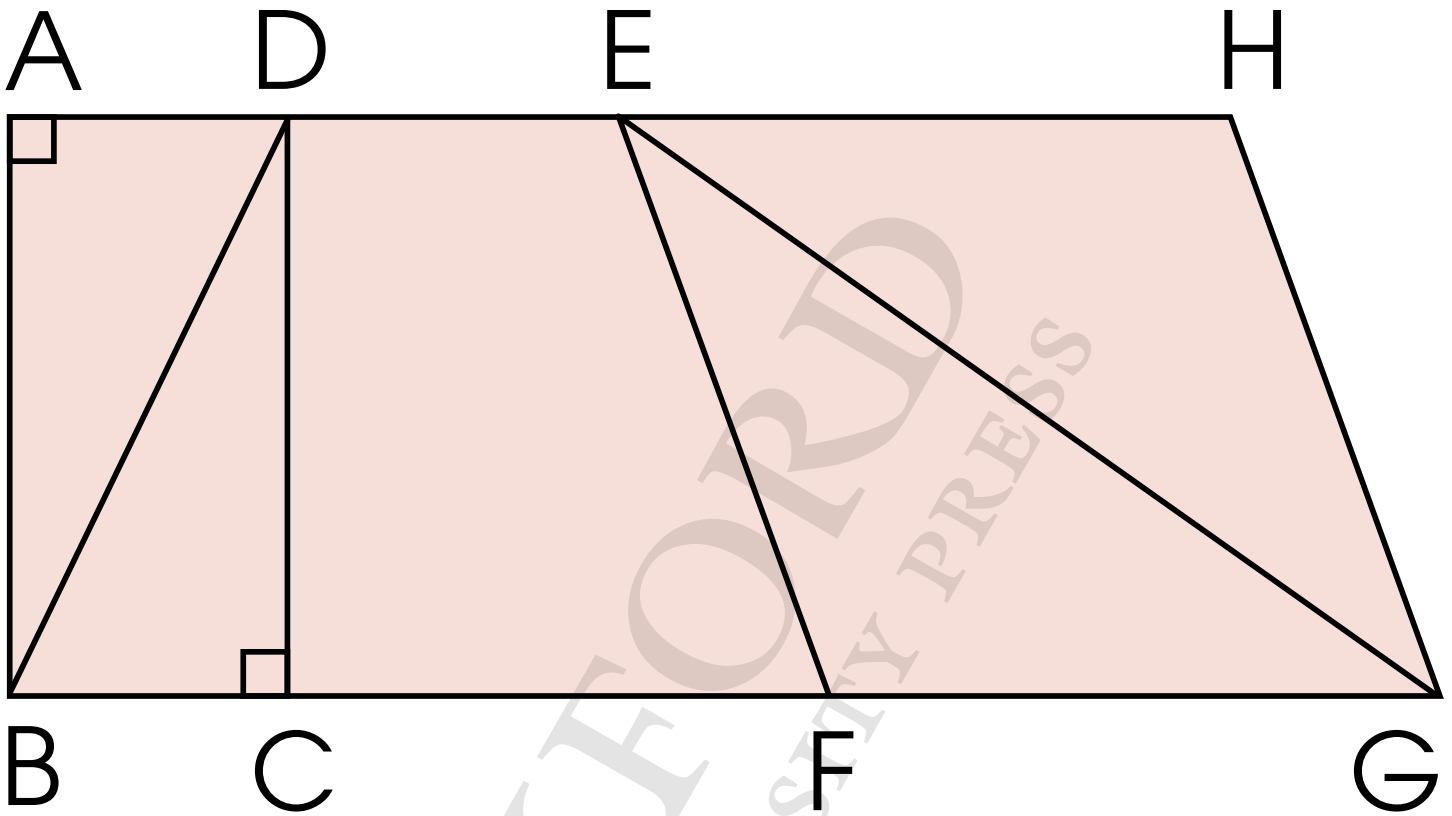
Figure (d)



\* Note to teacher:

- Cut out the figure and laminate it for 'Activity Time' (Textbook 6 P28).

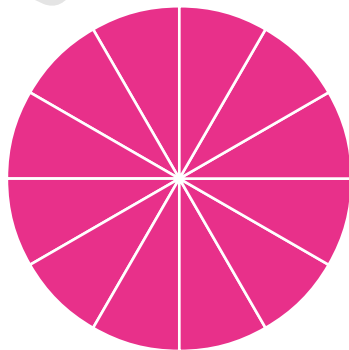
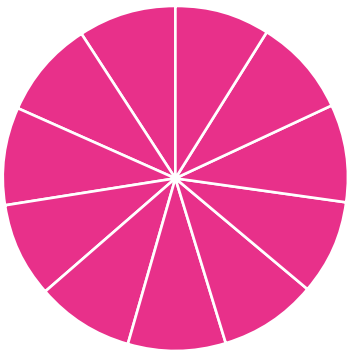
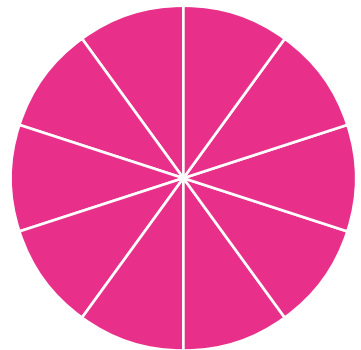
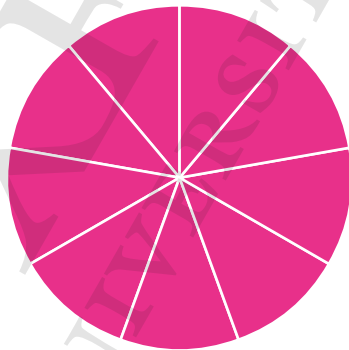
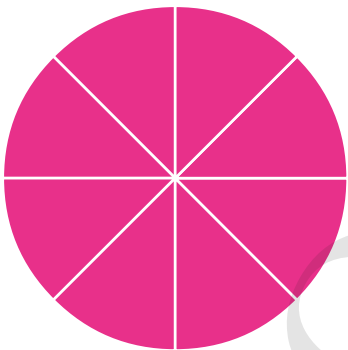
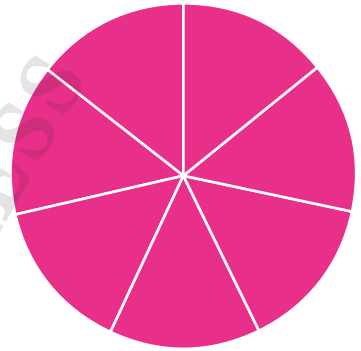
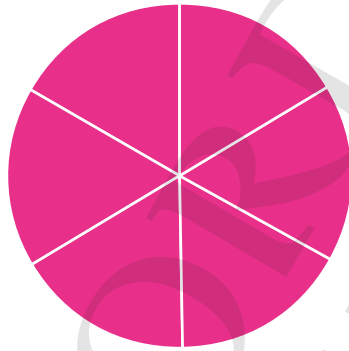
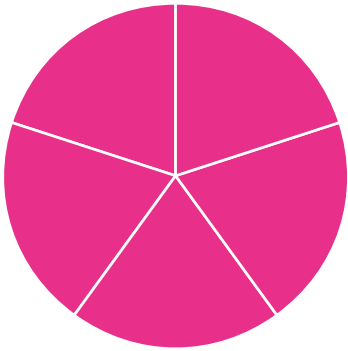
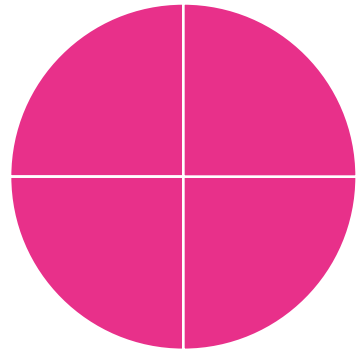
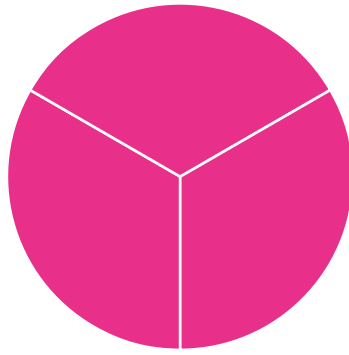
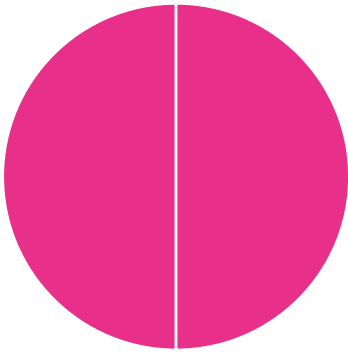
Figure ABGH



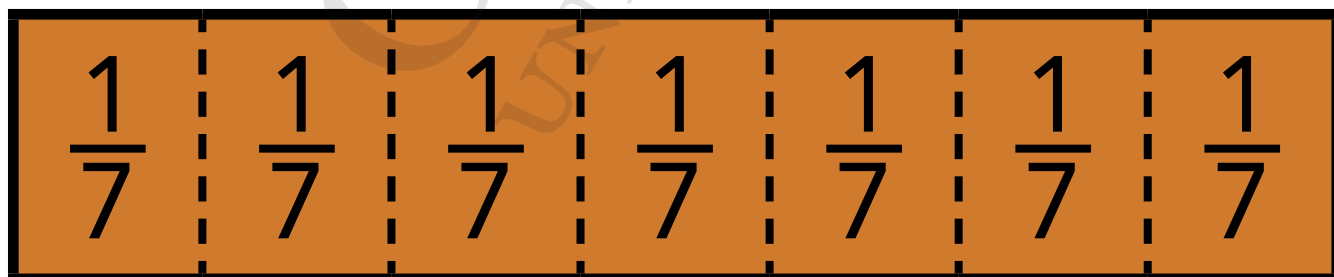
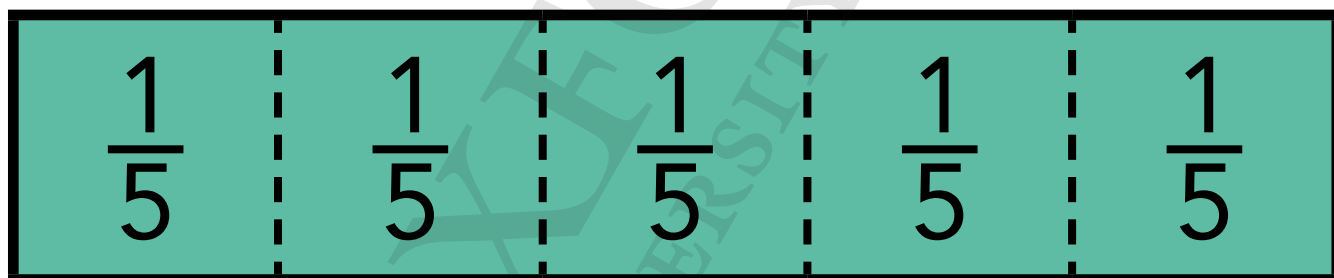
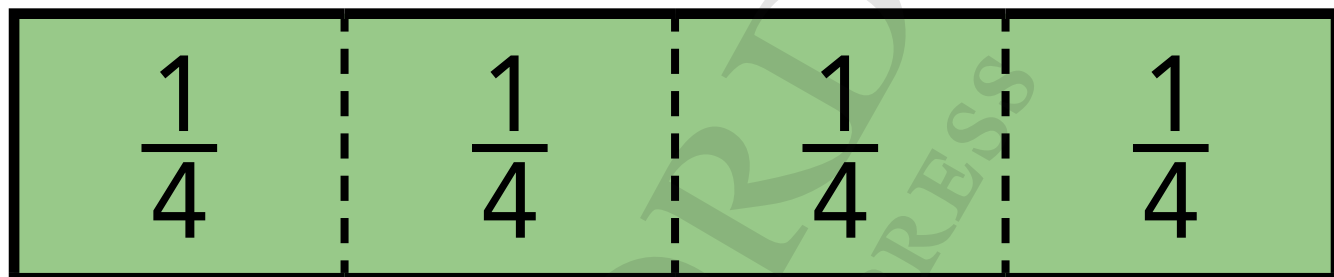
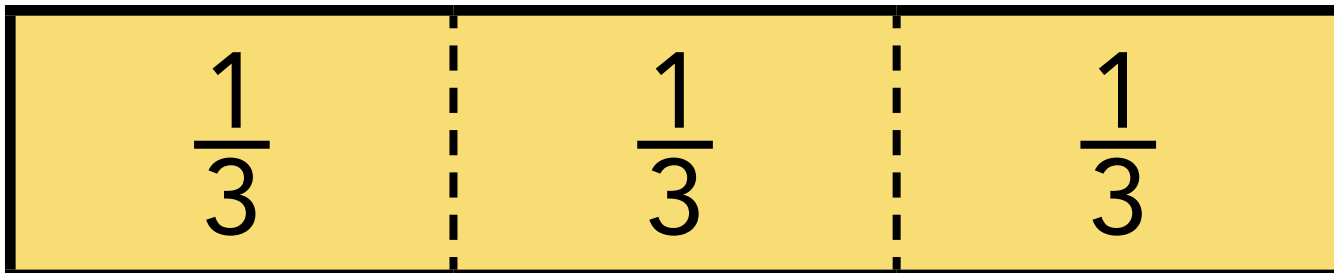
\* Note to teacher:

- Cut out the figure and laminate it for 'Maths Journal' (Textbook 6 P32).

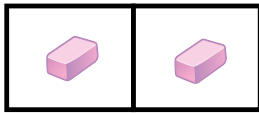
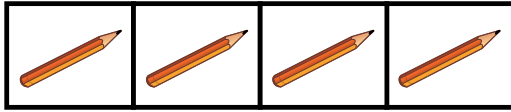
# Fraction Discs



## Fraction Bars



# Bar Models



## Ratio Cards

The number of pens is  $\frac{2}{3}$  of the number of pencils.

Ratio of number of pens to number of pencils is 2 : 3 .

The number of pencils is  $\frac{3}{2}$  of the number of pens.

Ratio of number of pencils to number of pens is 3 : 2 .

\* Note to teacher:

- Use these for 'Activity Time' (Textbook 6 P71).



## Ingredients for lemonade (serves 10)

- 1 cup white sugar
- 5 cups water
- $\frac{1}{2}$  cup lemon juice

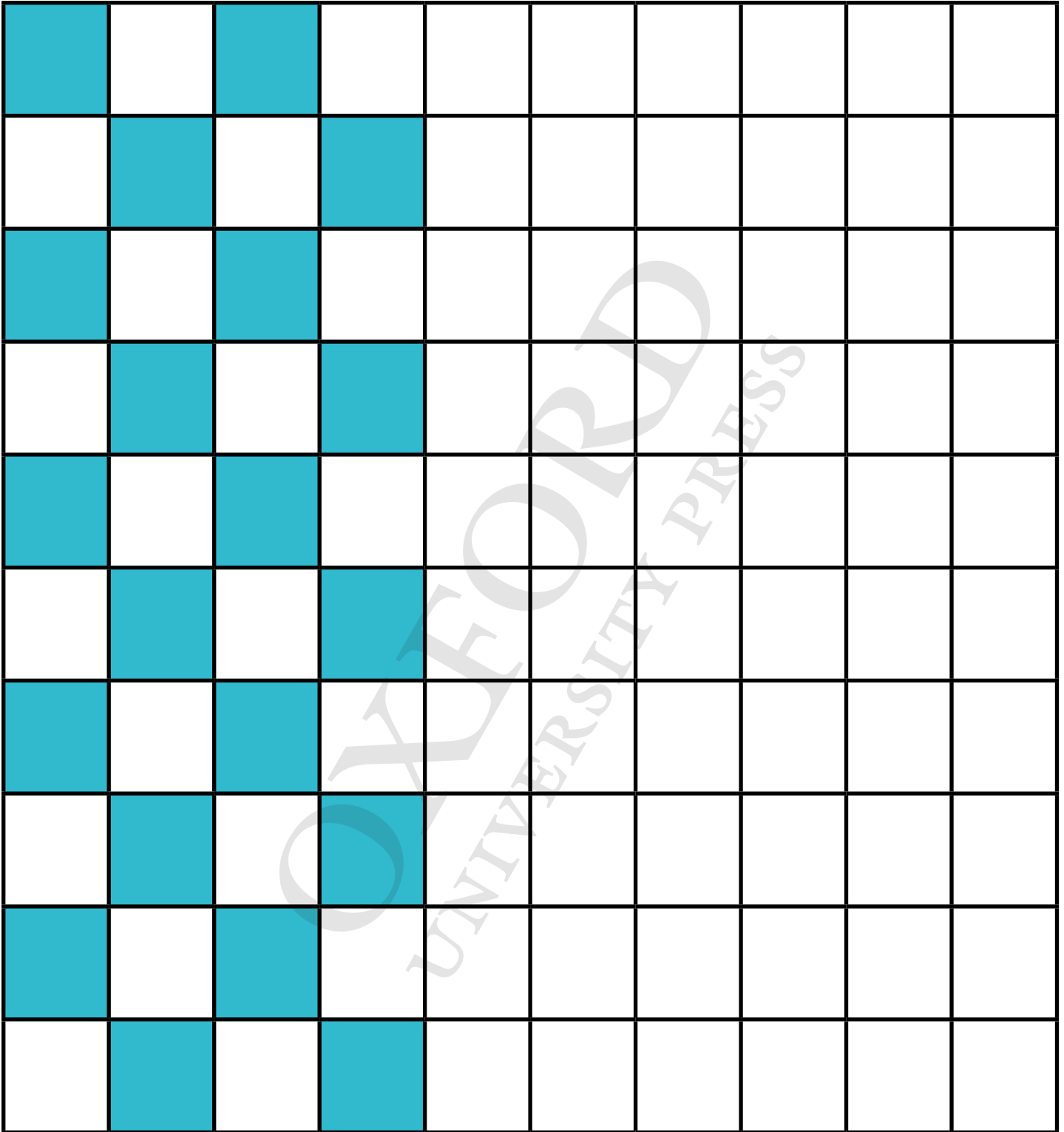
3 cups macaroni

1 can condensed cream  
of chicken soup

1 can tuna

$\frac{1}{2}$  cup French fried onions

## Shaded and Unshaded Squares



## Percentage Increase and Decrease Formulae

$$\text{Percentage increase} = \frac{\text{Increase}}{\text{Original quantity}} \times 100\%$$

$$\text{Percentage decrease} = \frac{\text{Decrease}}{\text{Original quantity}} \times 100\%$$

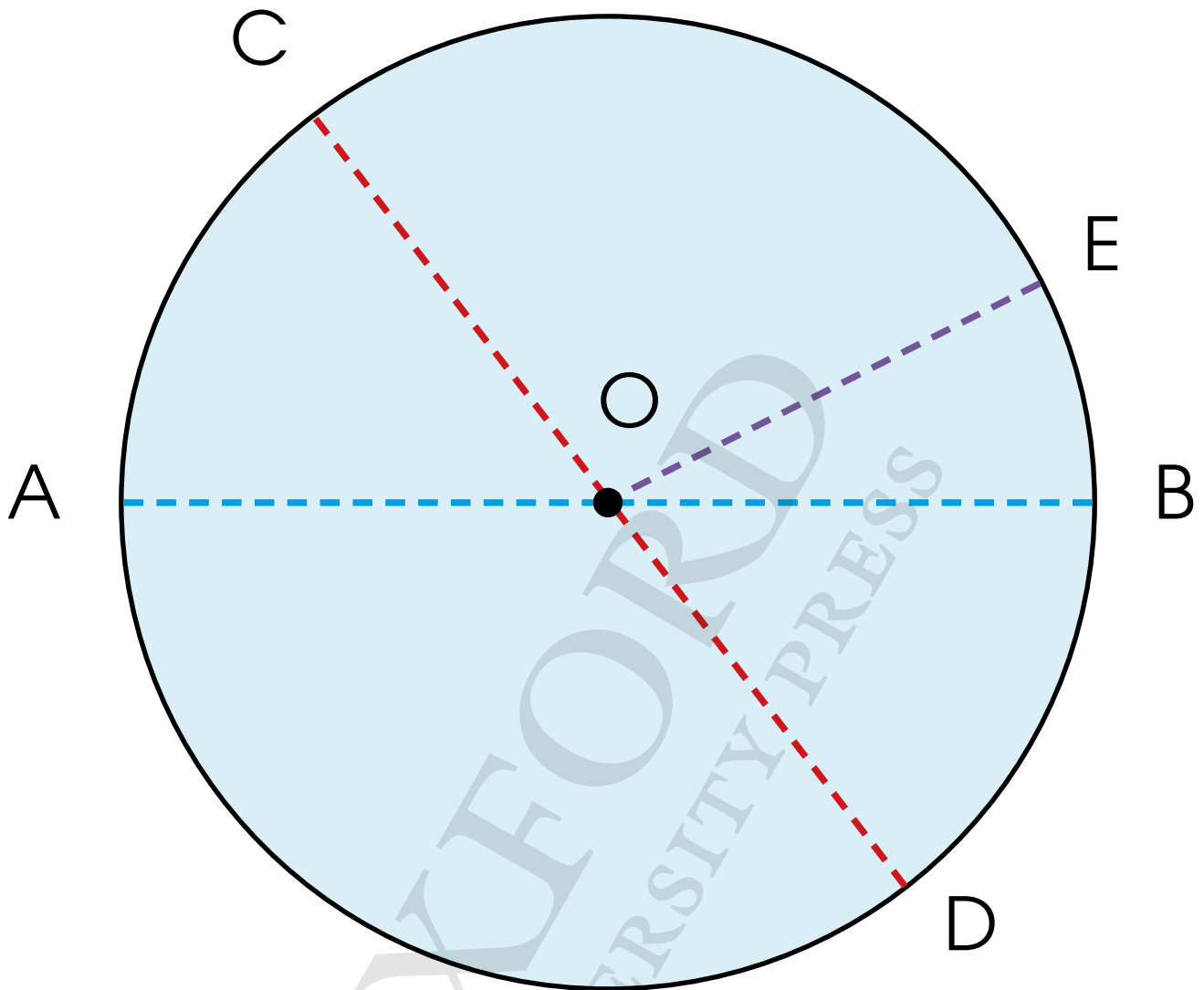
## Table of Results

| First number | Second number | Increase/Decrease |
|--------------|---------------|-------------------|
|              |               |                   |

\* Note to teacher:

- Cut out the table and laminate it for 'Activity Time' (Textbook 6 P106). Provide pupils with markers to fill in the table.

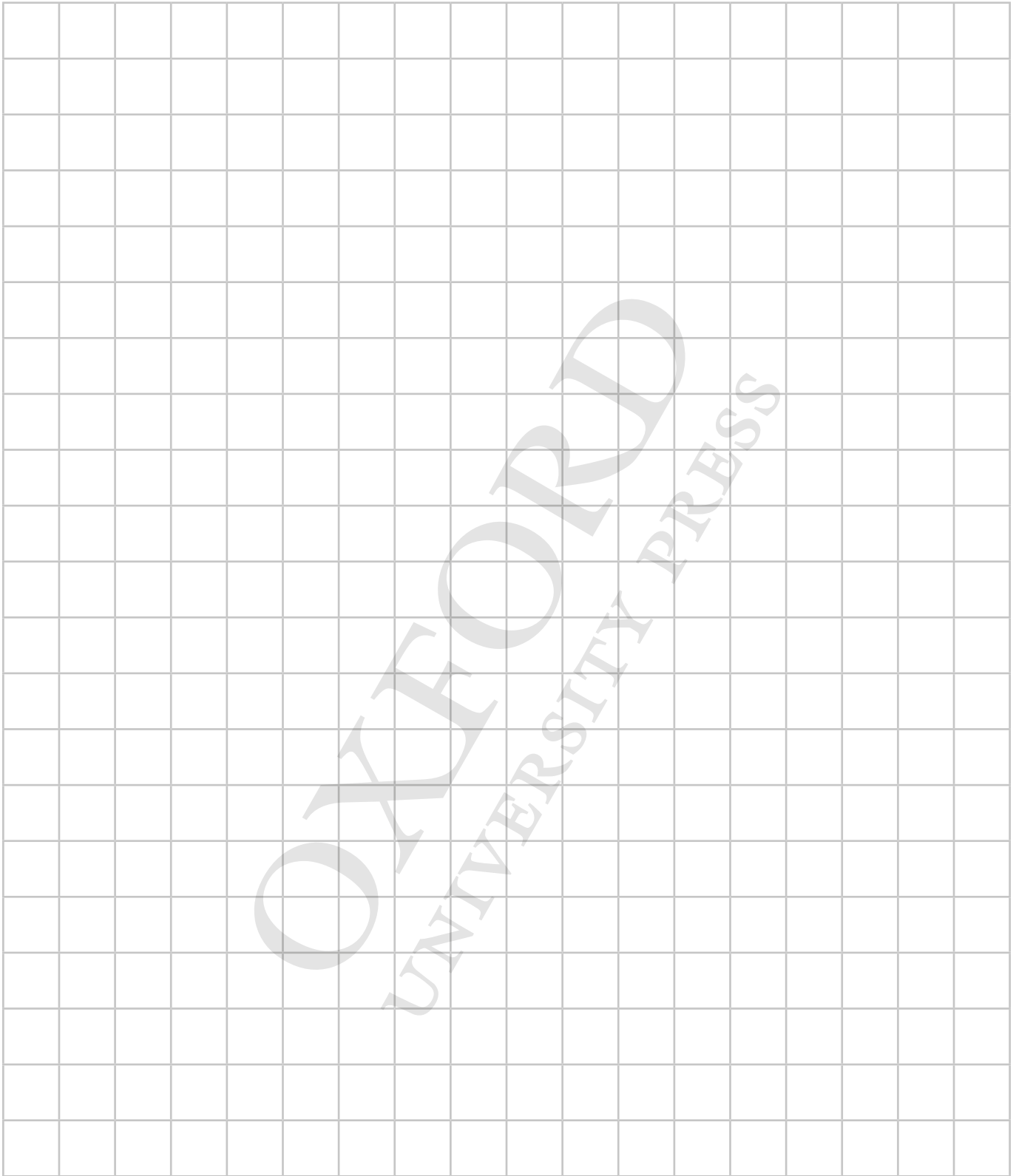
# Circle



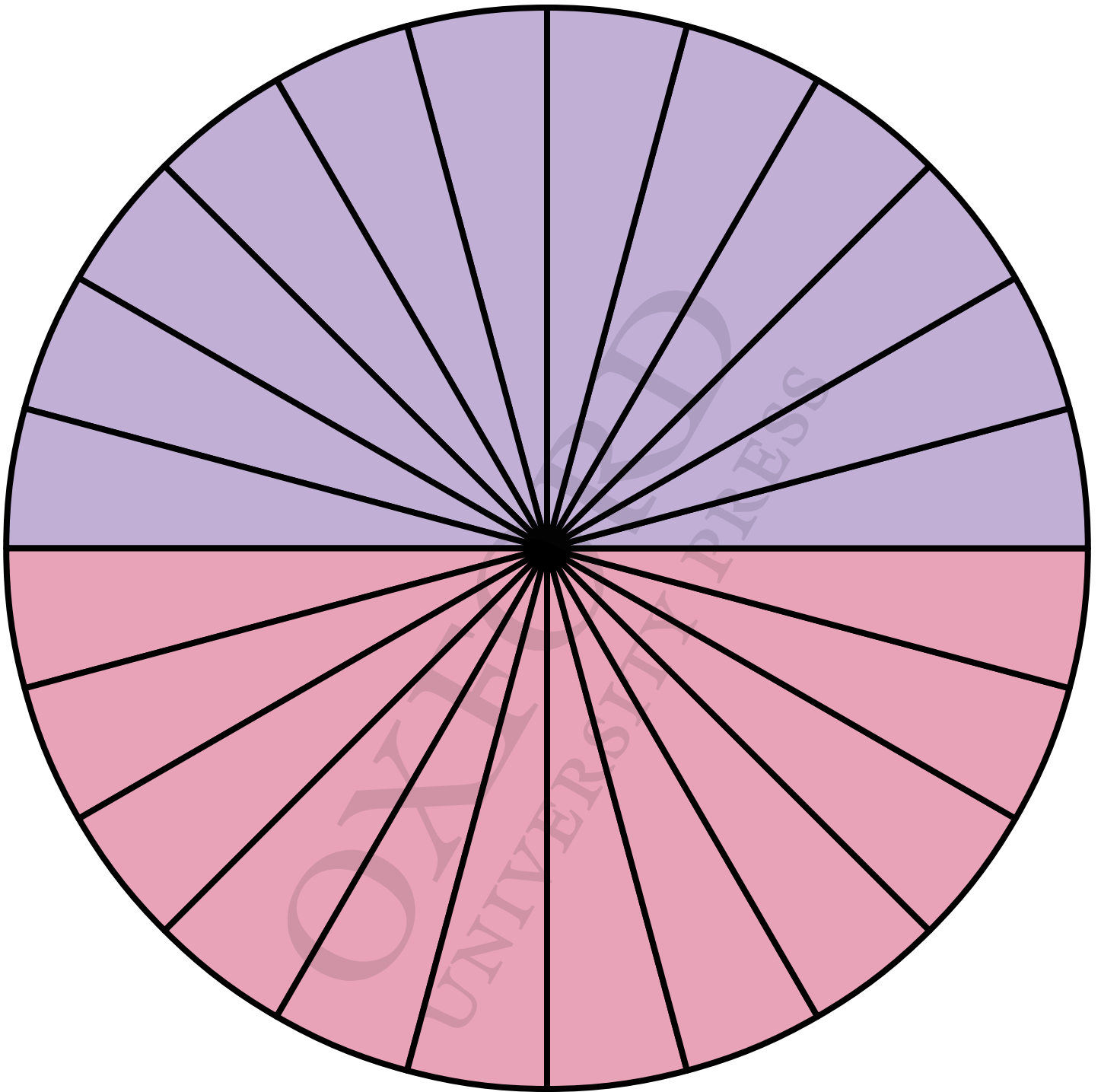
$$\begin{aligned}\text{Circumference} \div \text{Diameter} &= \pi \\ \text{Circumference} &= \pi \times \text{Diameter} \\ &= \pi \times 2 \times \text{Radius}\end{aligned}$$

$$\text{Area of circle} = \pi \times \text{Radius} \times \text{Radius}$$

# 1-cm Square Grid

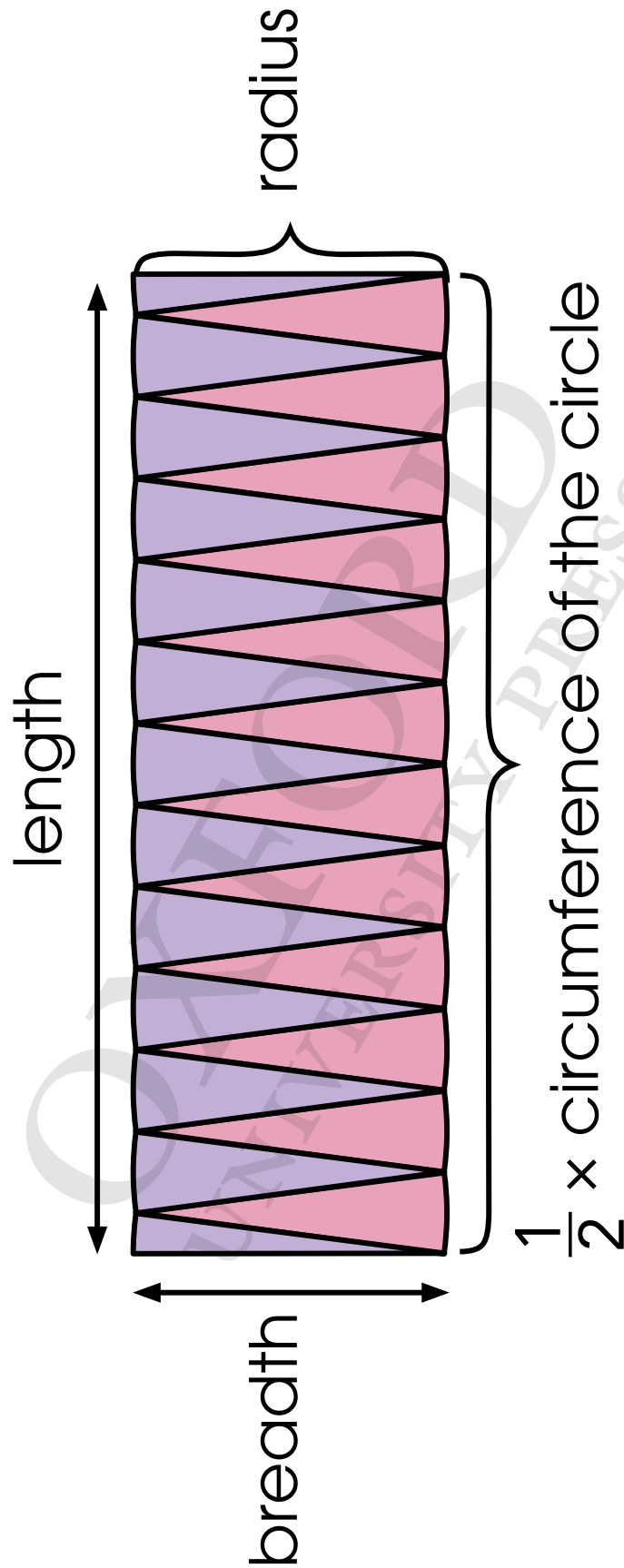


# Circle Divided into 24 Equal Pieces

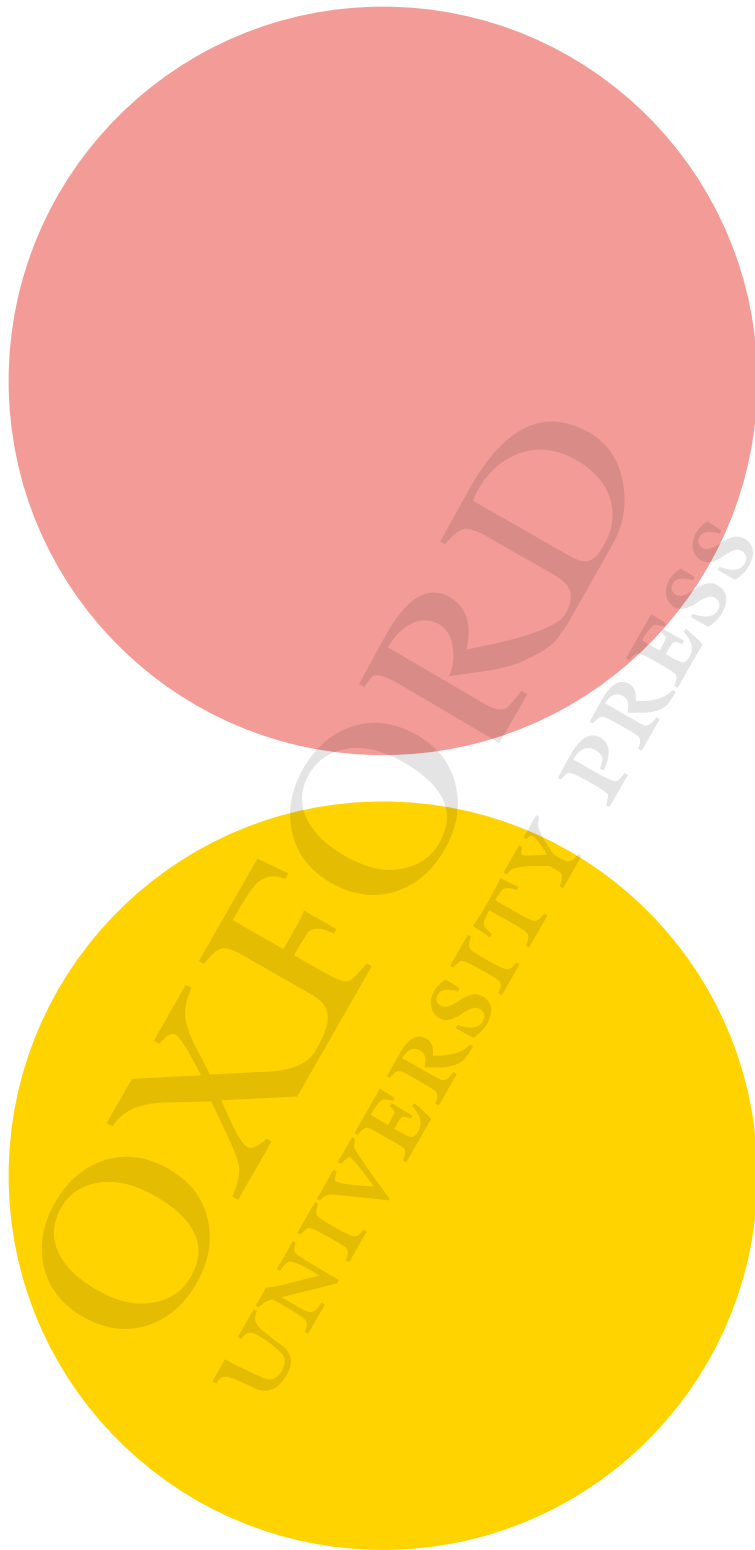




## 24 Equal Pieces of a Circle Rearranged to Form a Rectangle



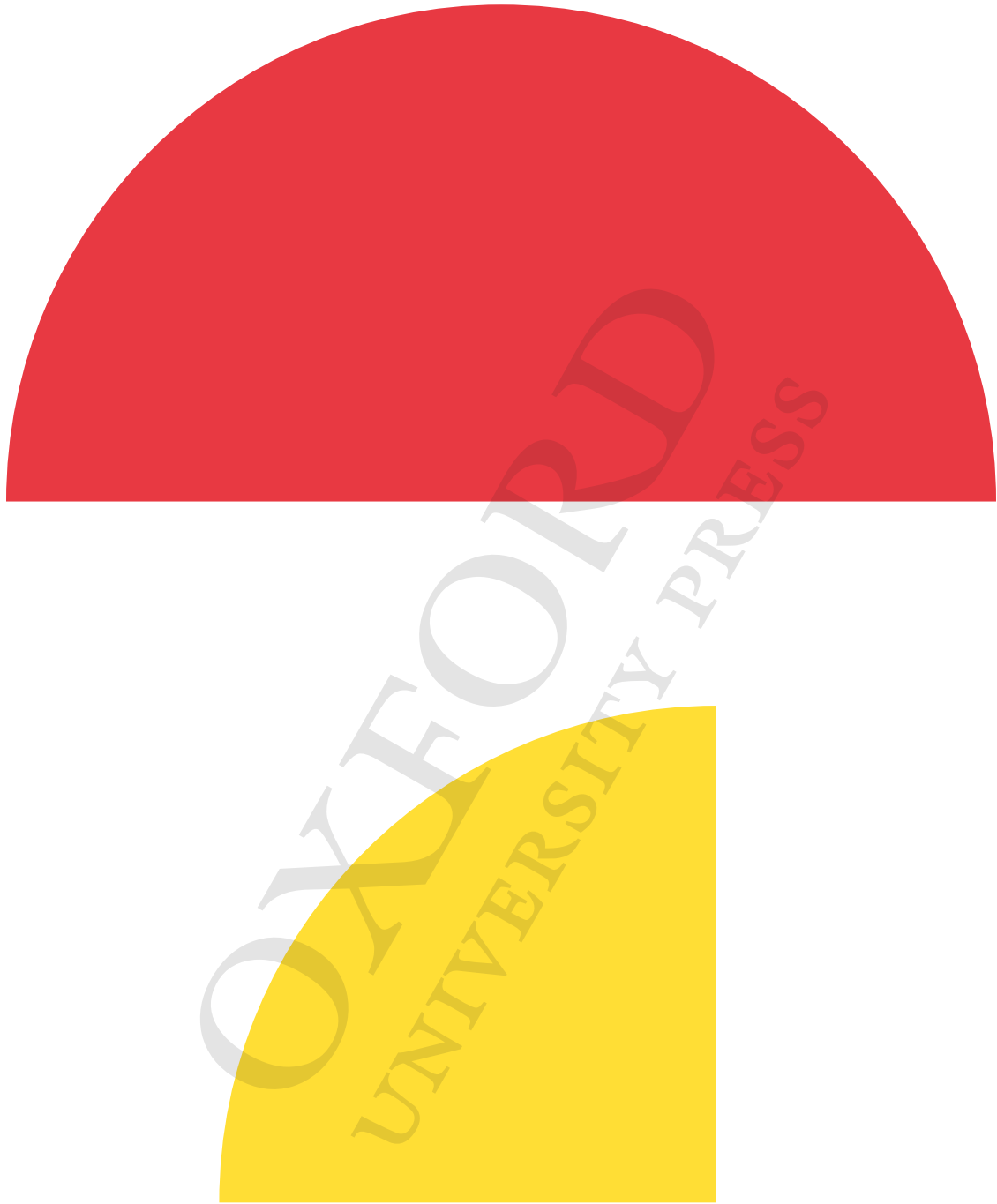
## Circle Cut-outs



\* Note to teacher:

- Cut out the shapes for 'Activity Time' (Textbook 6 P133).

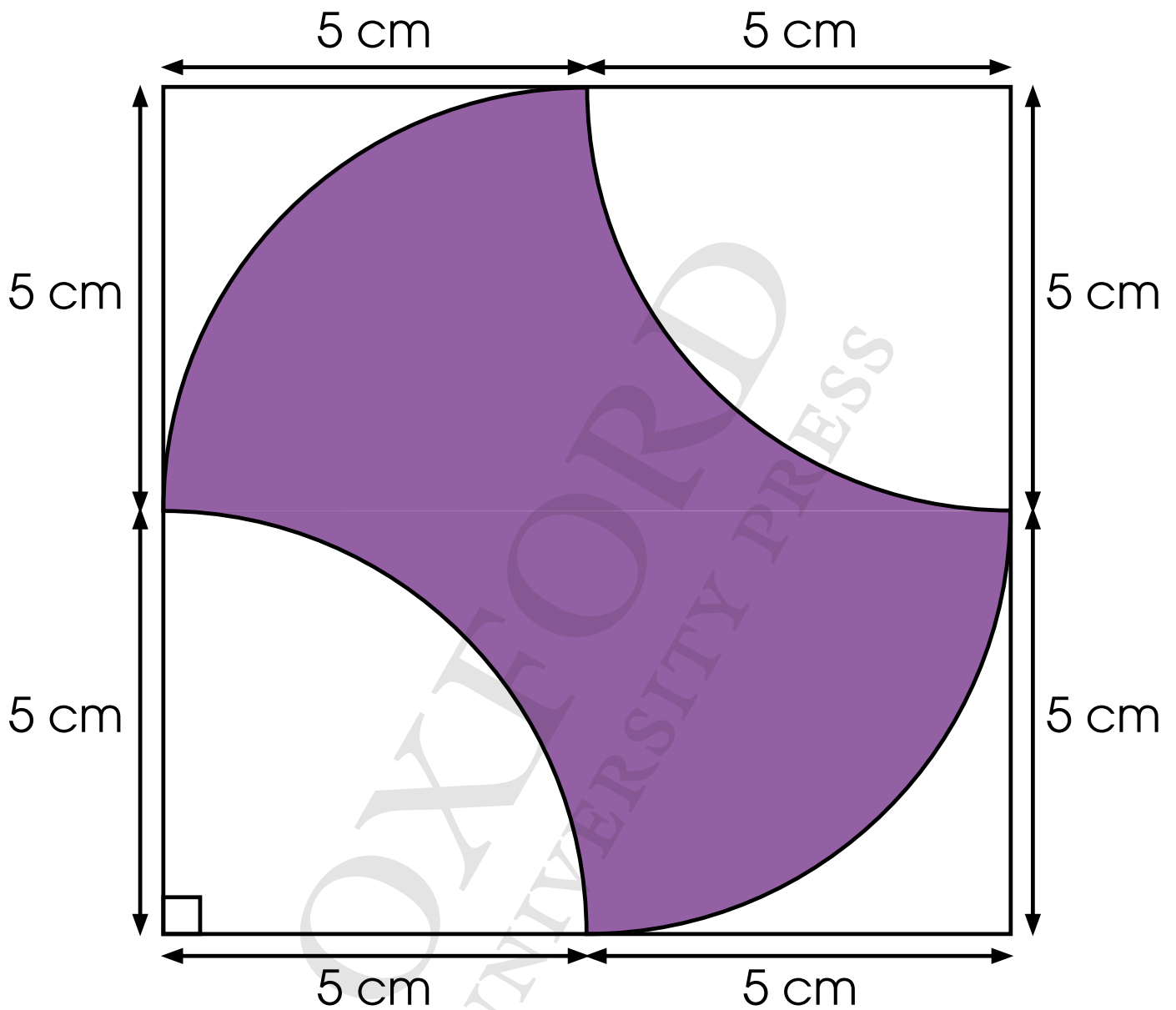
## Semicircle and Quarter Circle Cut-outs



\* Note to teacher:

- Cut out the shapes for 'Activity Time' (Textbook 6 P136).

## Finding Area of Shaded Part



\* Note to teacher:

- Cut out the figure for 'Mind Workout' (Textbook 6 P143).

## Distance, Speed, Time Formulae

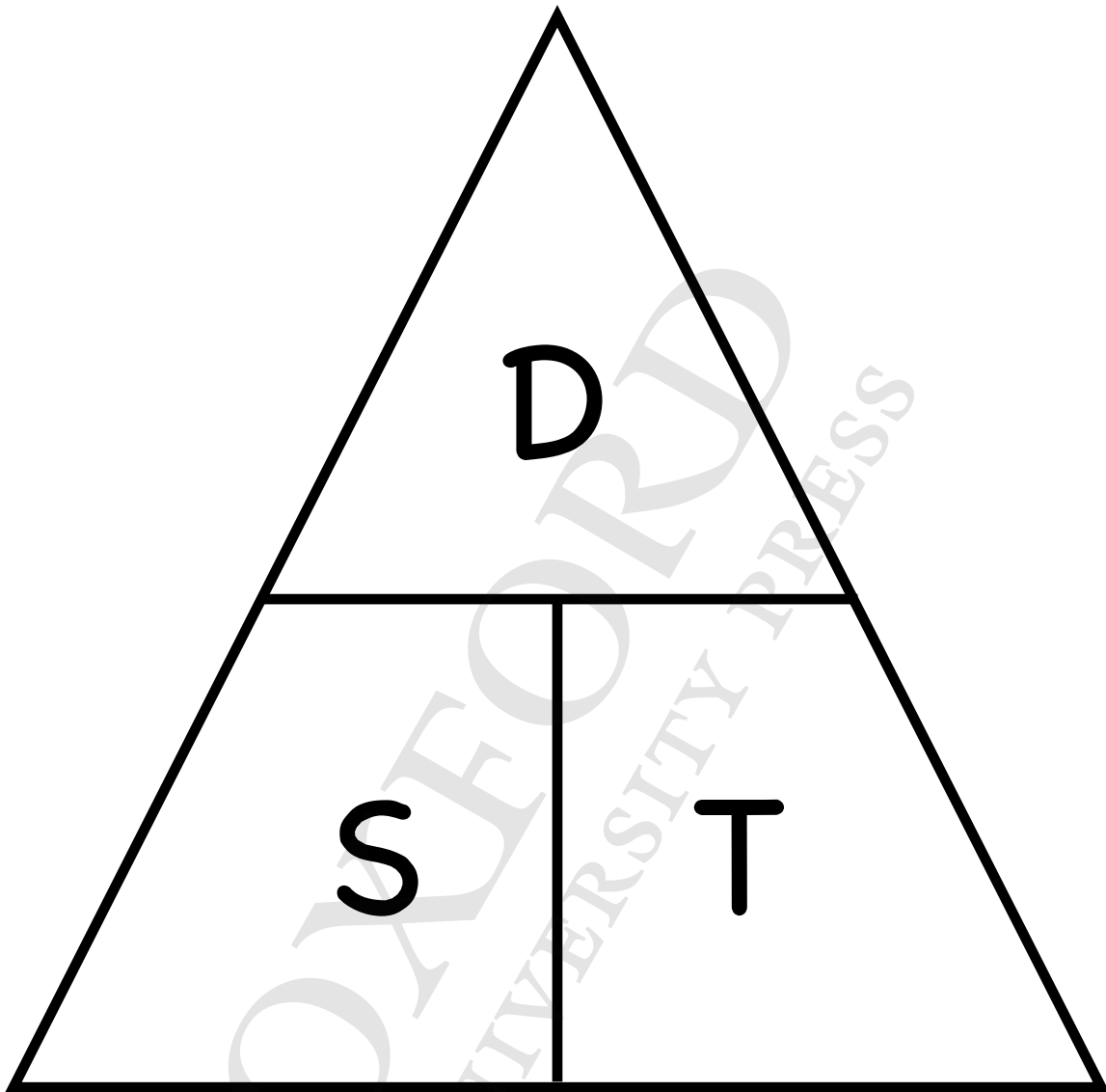
$$\begin{aligned}\text{Speed} &= \text{Distance} \div \text{Time} \\ &= \frac{\text{Distance}}{\text{Time}}\end{aligned}$$

$$\text{Distance} = \text{Speed} \times \text{Time}$$

$$\begin{aligned}\text{Time} &= \text{Distance} \div \text{Speed} \\ &= \frac{\text{Distance}}{\text{Speed}}\end{aligned}$$

$$\begin{aligned}\text{Average Speed} &= \text{Total distance} \div \text{Total time} \\ &= \frac{\text{Total distance}}{\text{Total time}}\end{aligned}$$

# Distance Speed Time Triangle



## Volume and Area Formulae

Volume of cube = Length  $\times$  Length  $\times$  Length


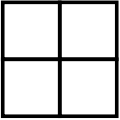
Volume of cuboid = Length  $\times$  Breadth  $\times$  Height

$$\text{Height} = \frac{\text{Volume}}{\text{Length} \times \text{Breadth}}$$

$$\text{Length} = \frac{\text{Volume}}{\text{Breadth} \times \text{Height}}$$

Area = Length  $\times$  Breadth

## Table of Values

| Base area of cube  | Volume of cube                         | Length of edge |
|--|--|----------------|
| <br>$1 \times 1 = 1 \text{ cm}^2$ | $1 \times 1 \times 1 = 1 \text{ cm}^3$ | 1 cm           |
| <br>$2 \times 2 = 4 \text{ cm}^2$ |  |                |
| $3 \times 3 = $ <input type="text"/> $\text{cm}^2$   |  |                |
| $4 \times 4 = $ <input type="text"/> $\text{cm}^2$   |  |                |

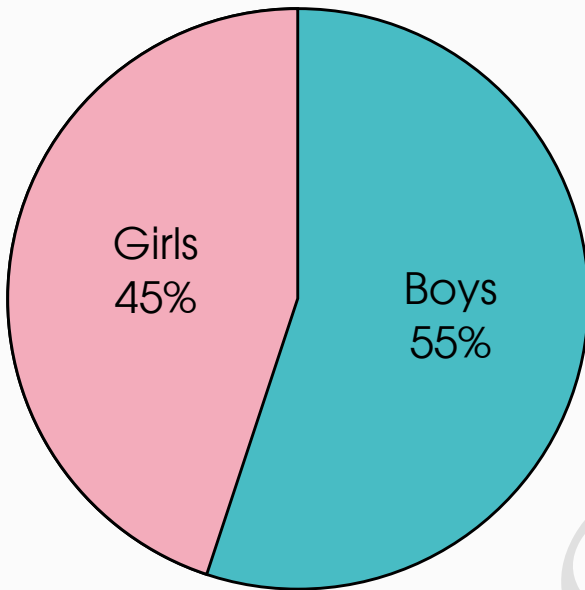
\* Note to teacher:

- Cut out the table and laminate it for 'Activity Time' (Textbook 6 P177). Provide pupils with markers to fill in the table.

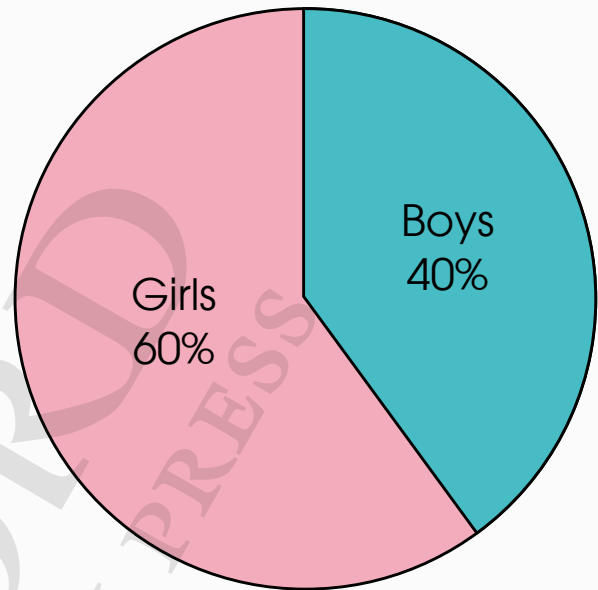


## Pie Charts

### Pupils in the Mathematics Club



2010

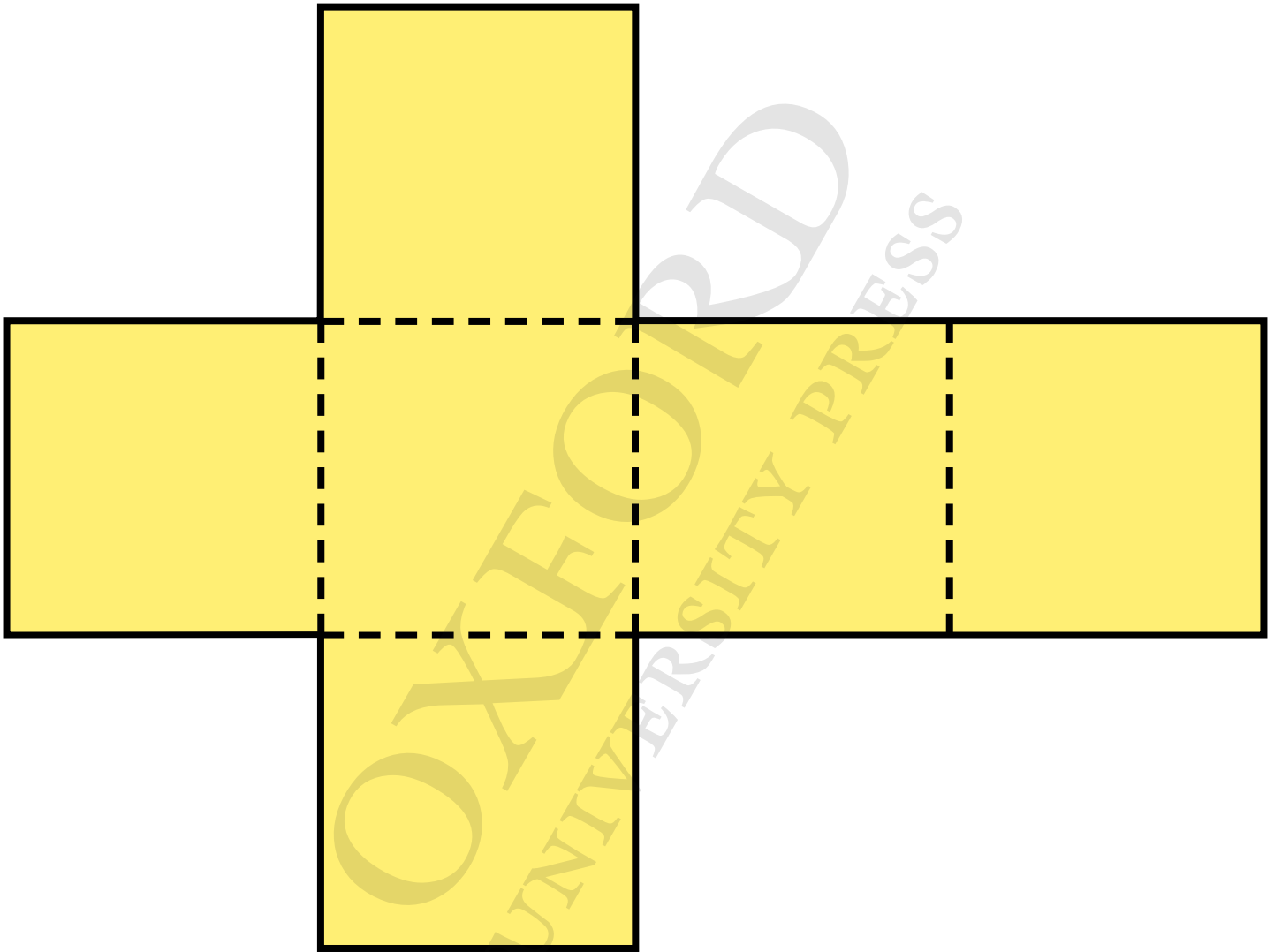


2015

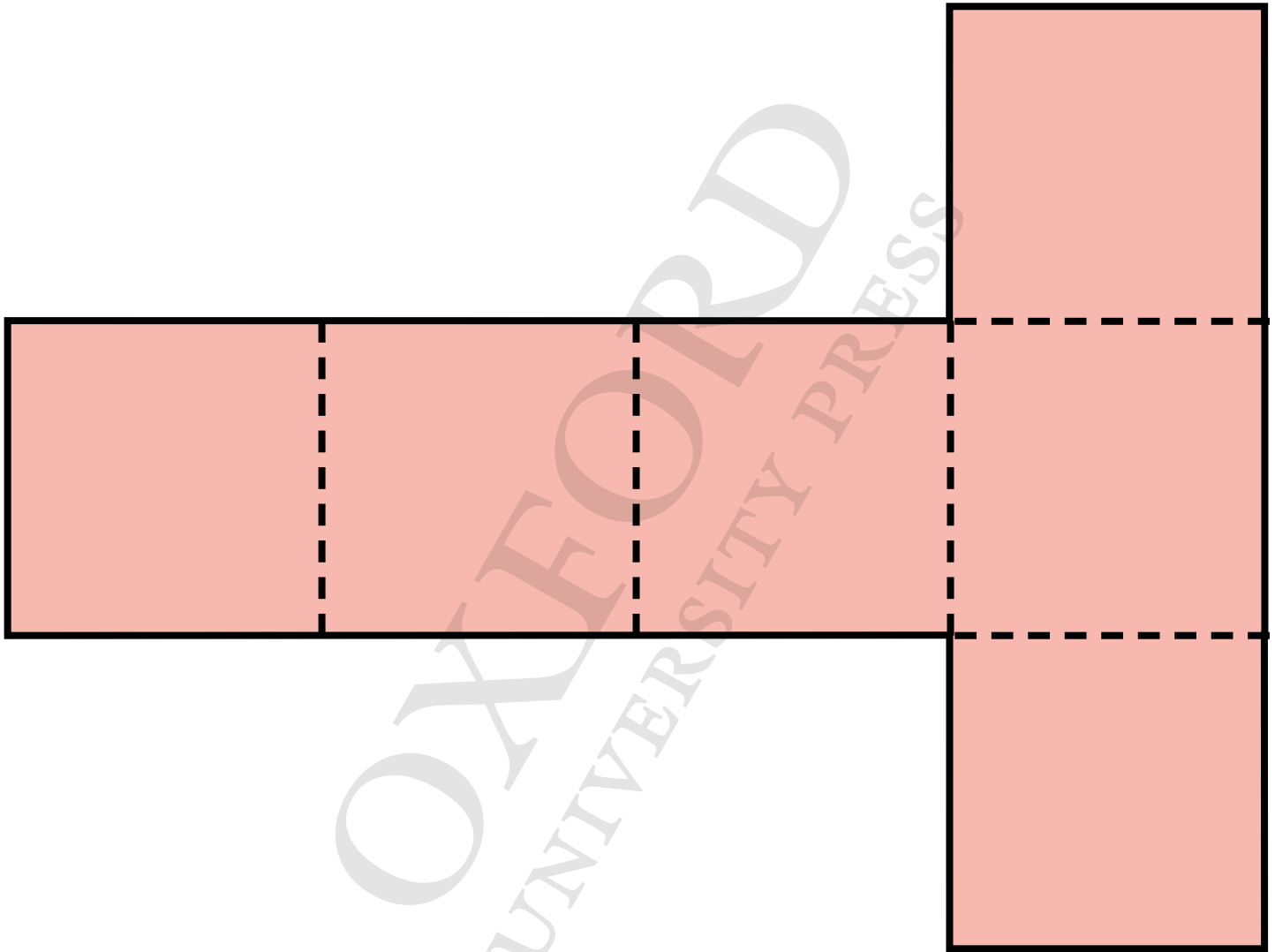
\* Note to teacher:

- These pie charts are to be used for 'Maths Journal' (Textbook 6 P209).

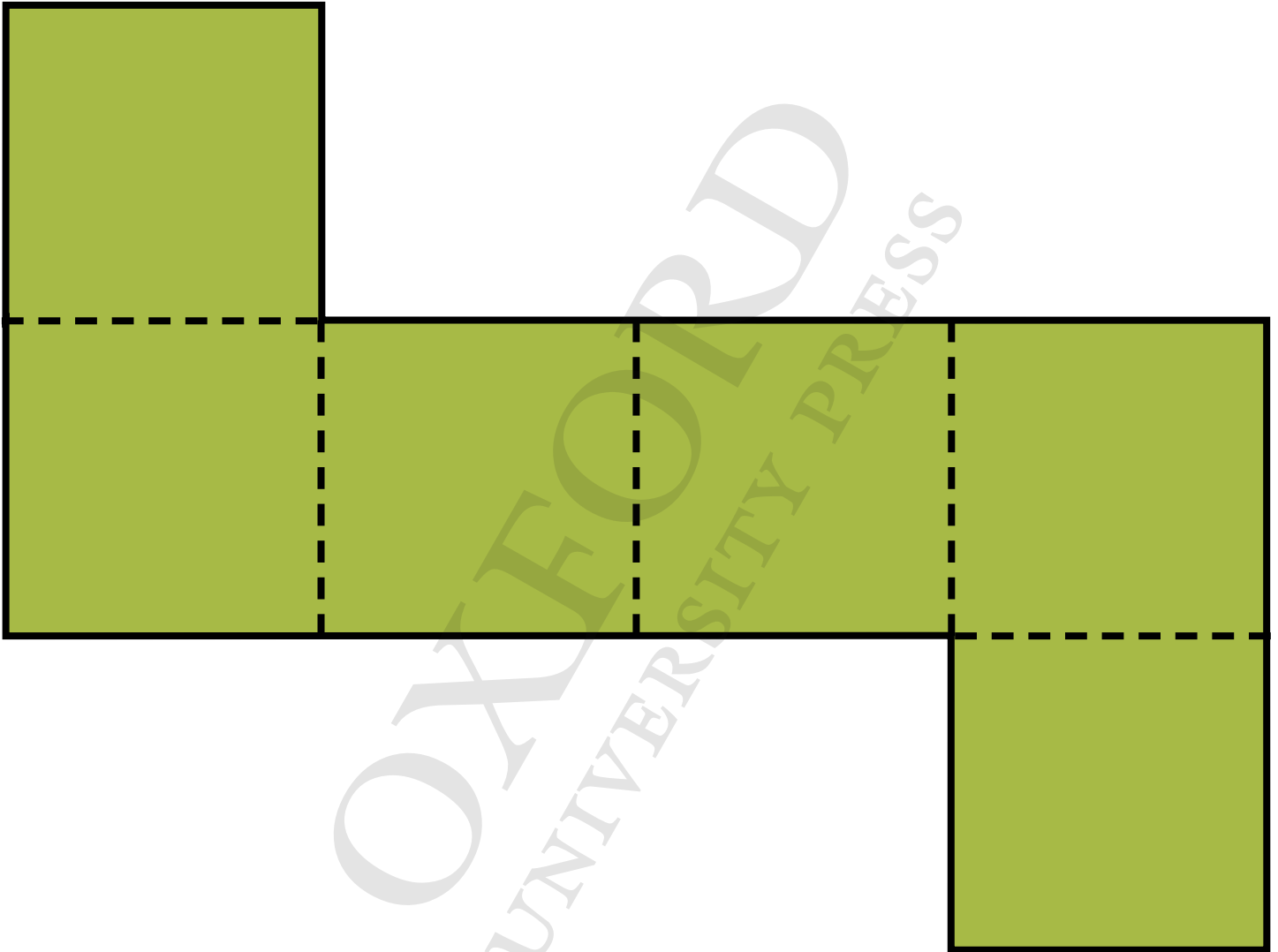
# Net of a Cube



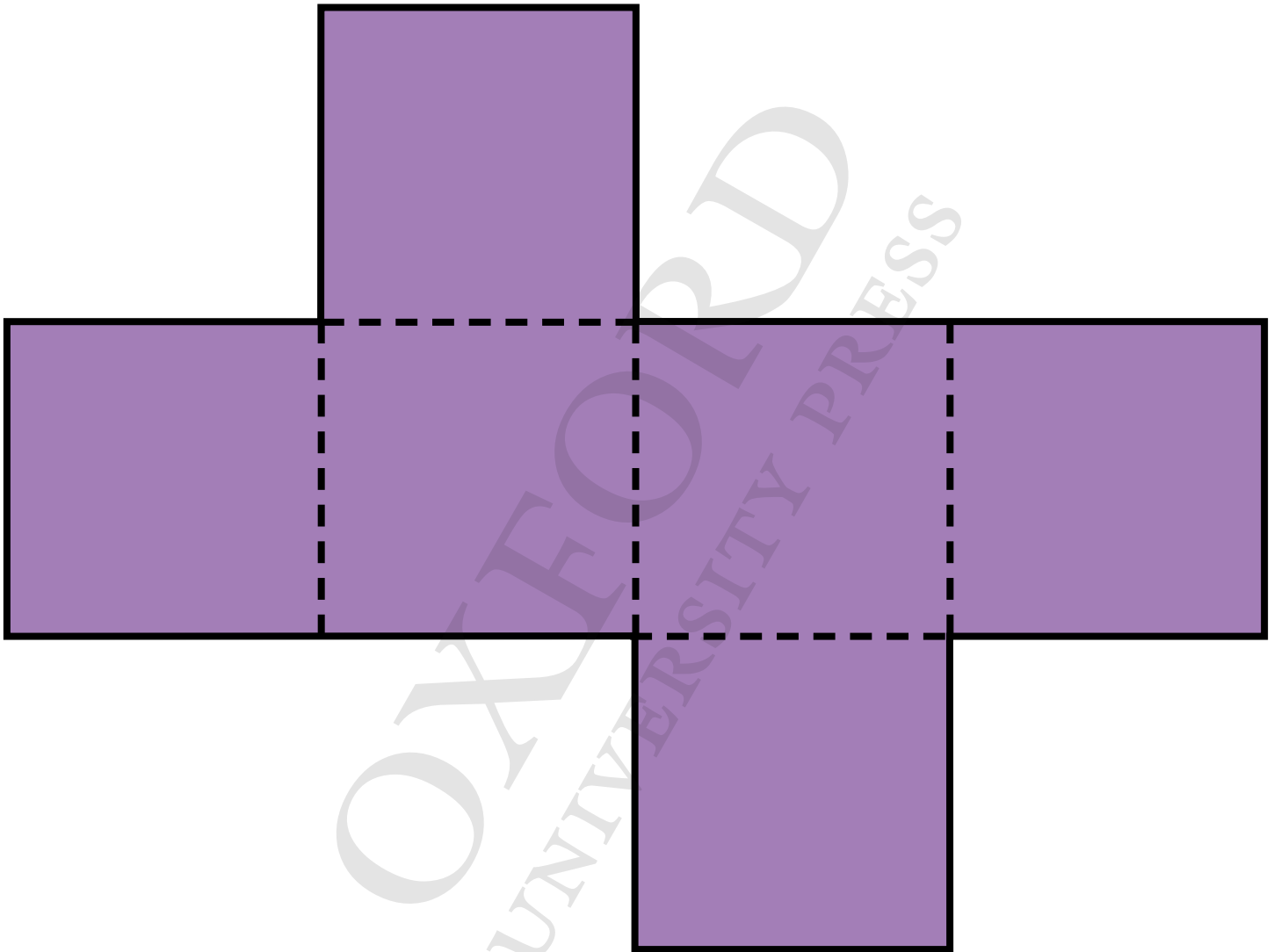
# Net of a Cube



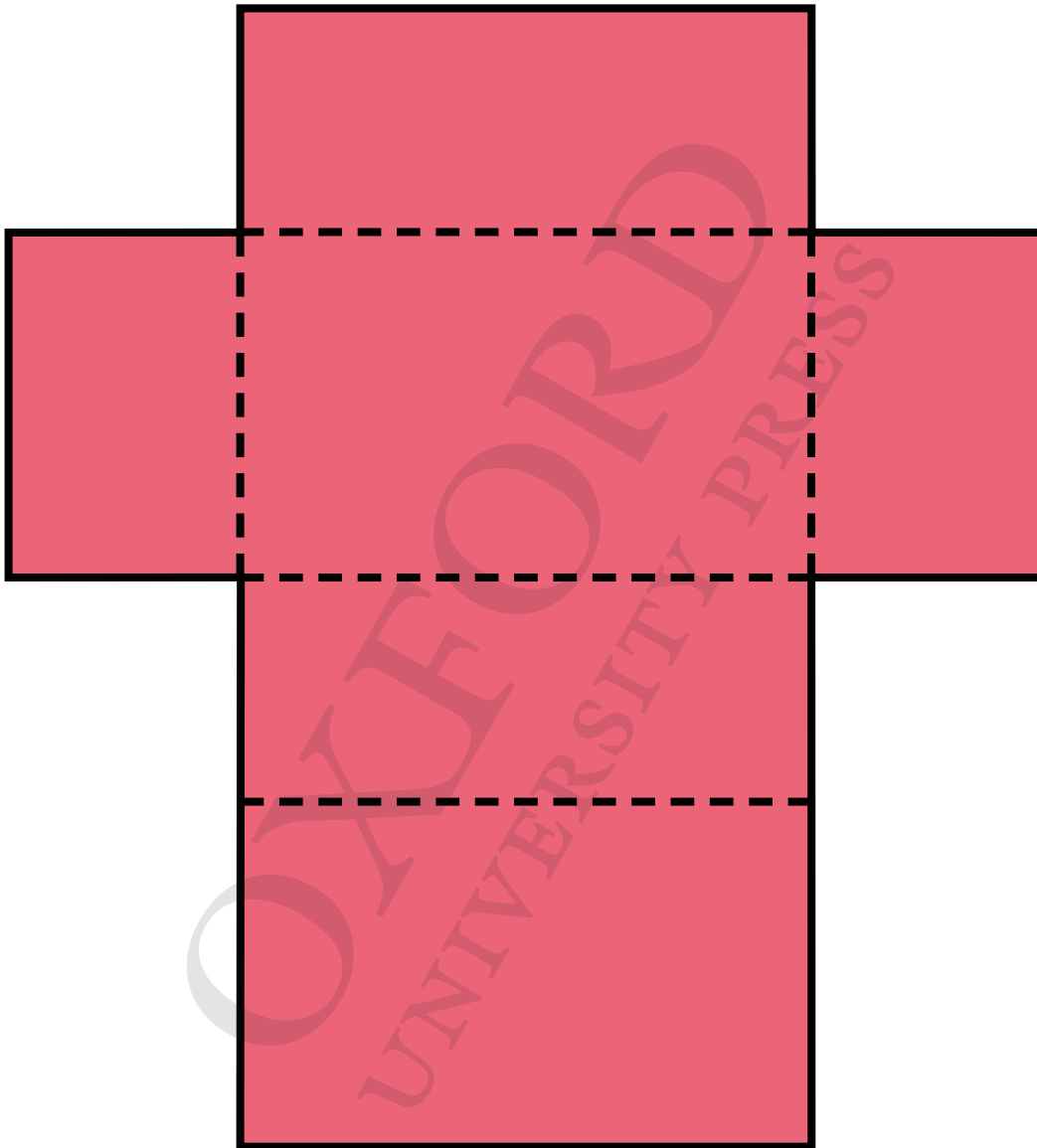
# Net of a Cube



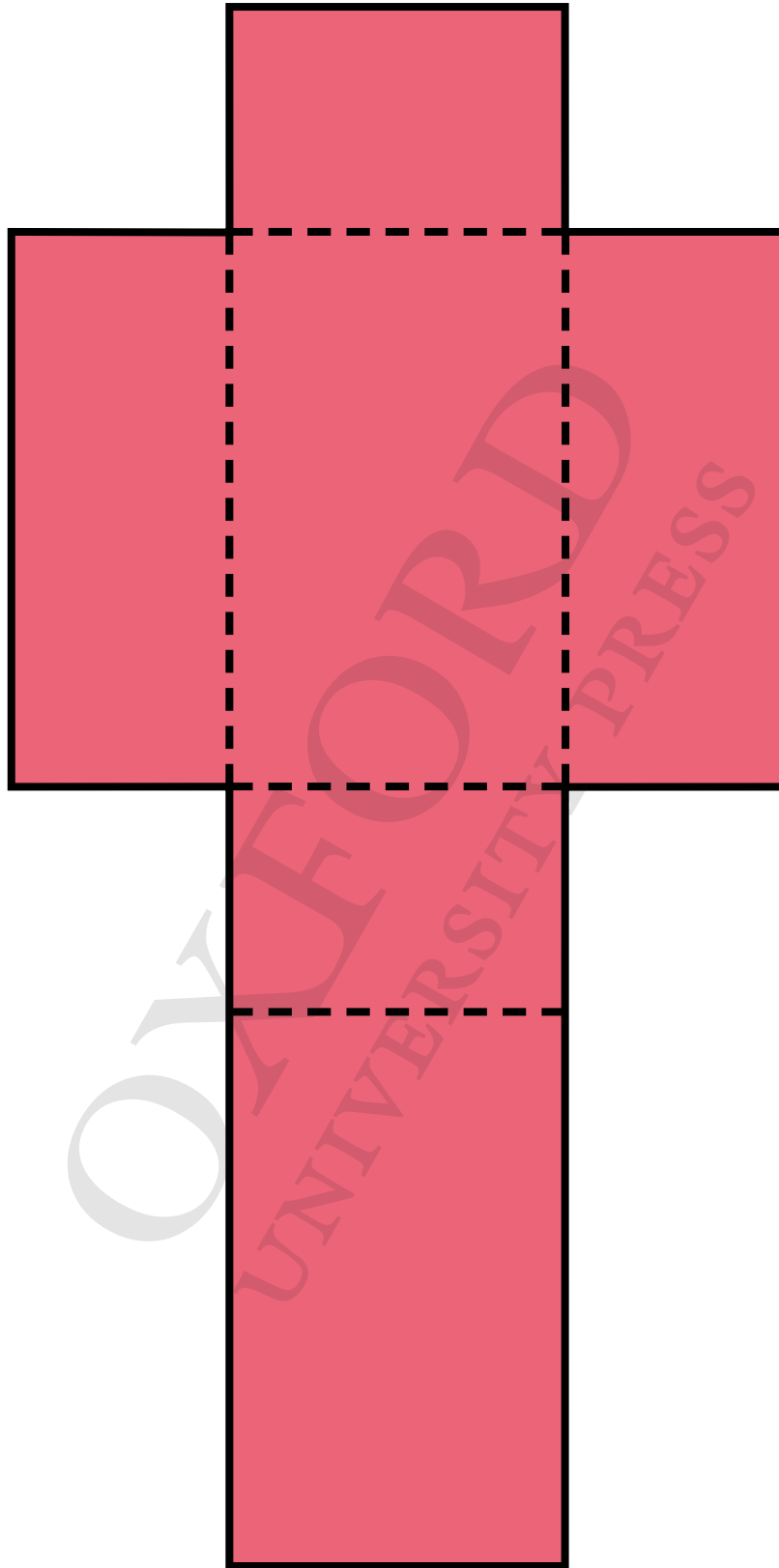
# Net of a Cube



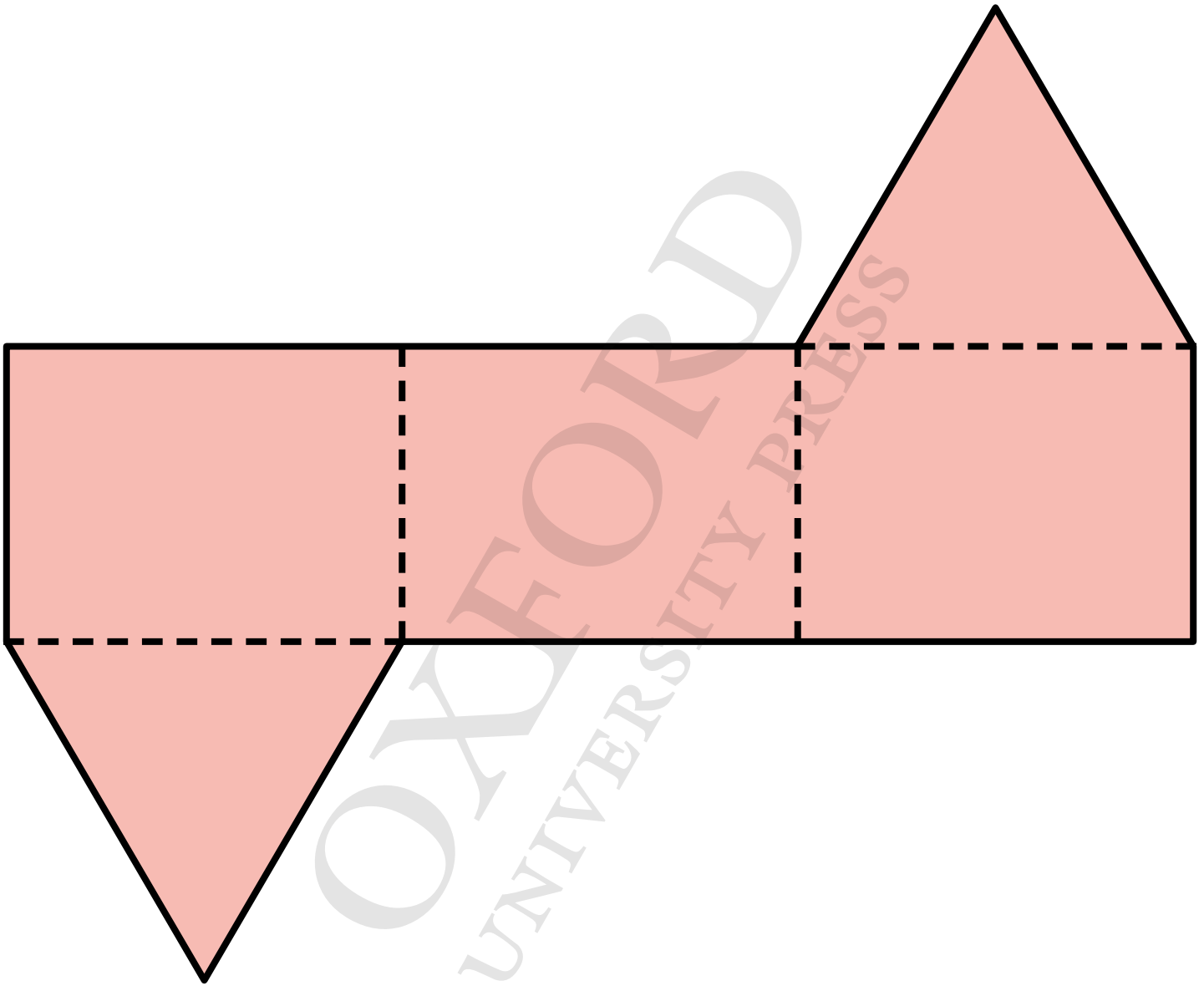
# Net of a Cuboid



# Net of a Cuboid

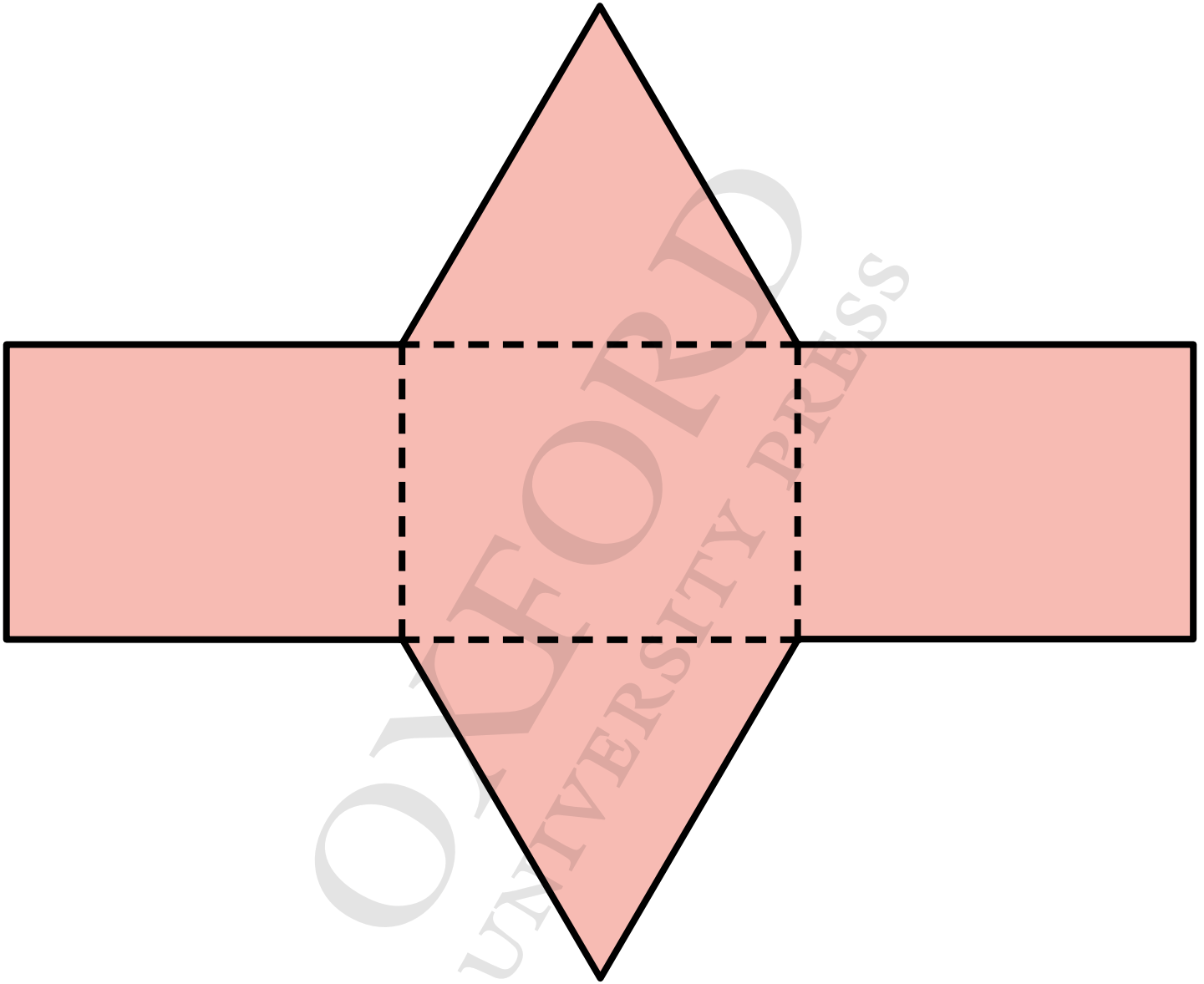


## Net of a Triangular Prism

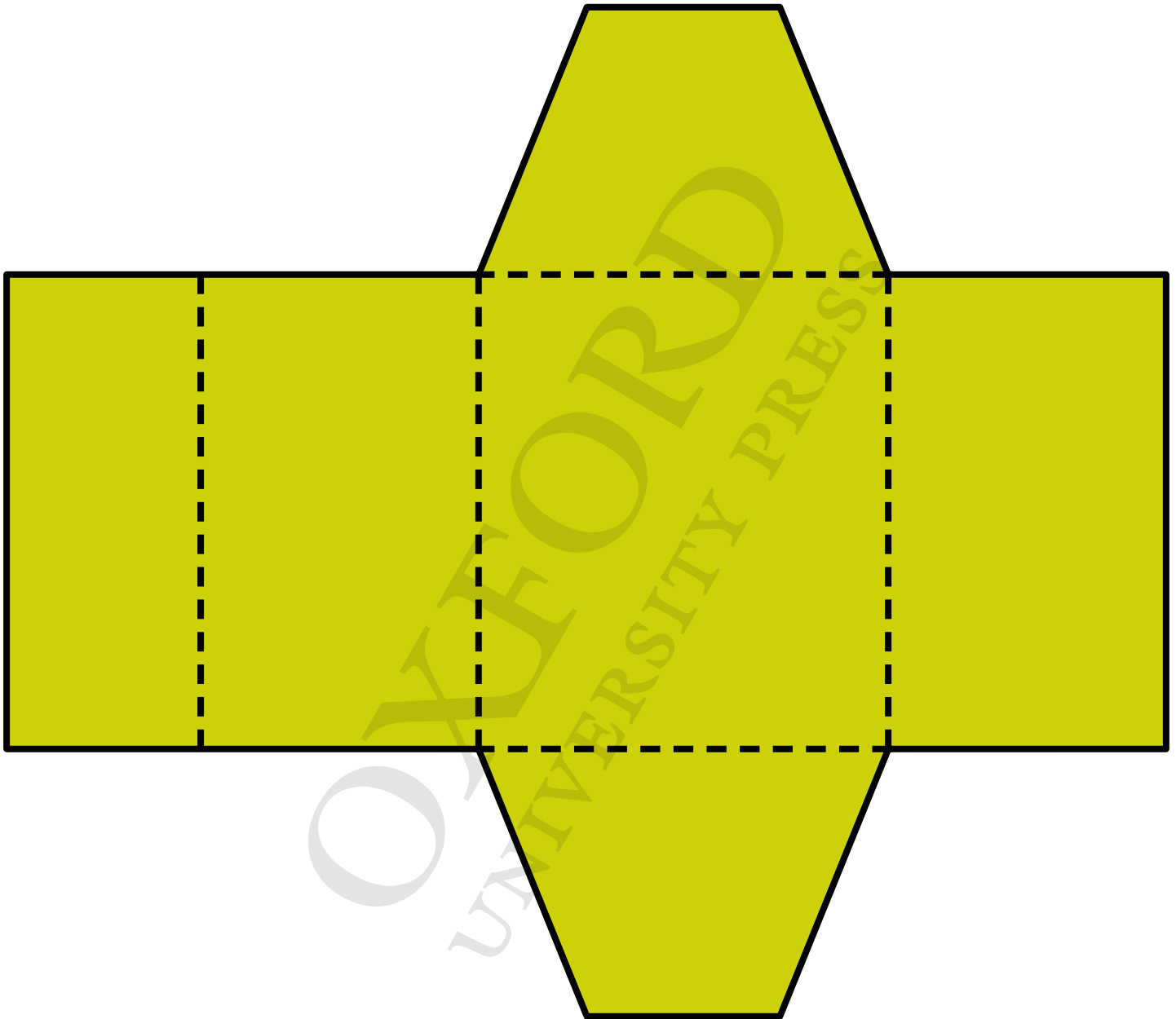




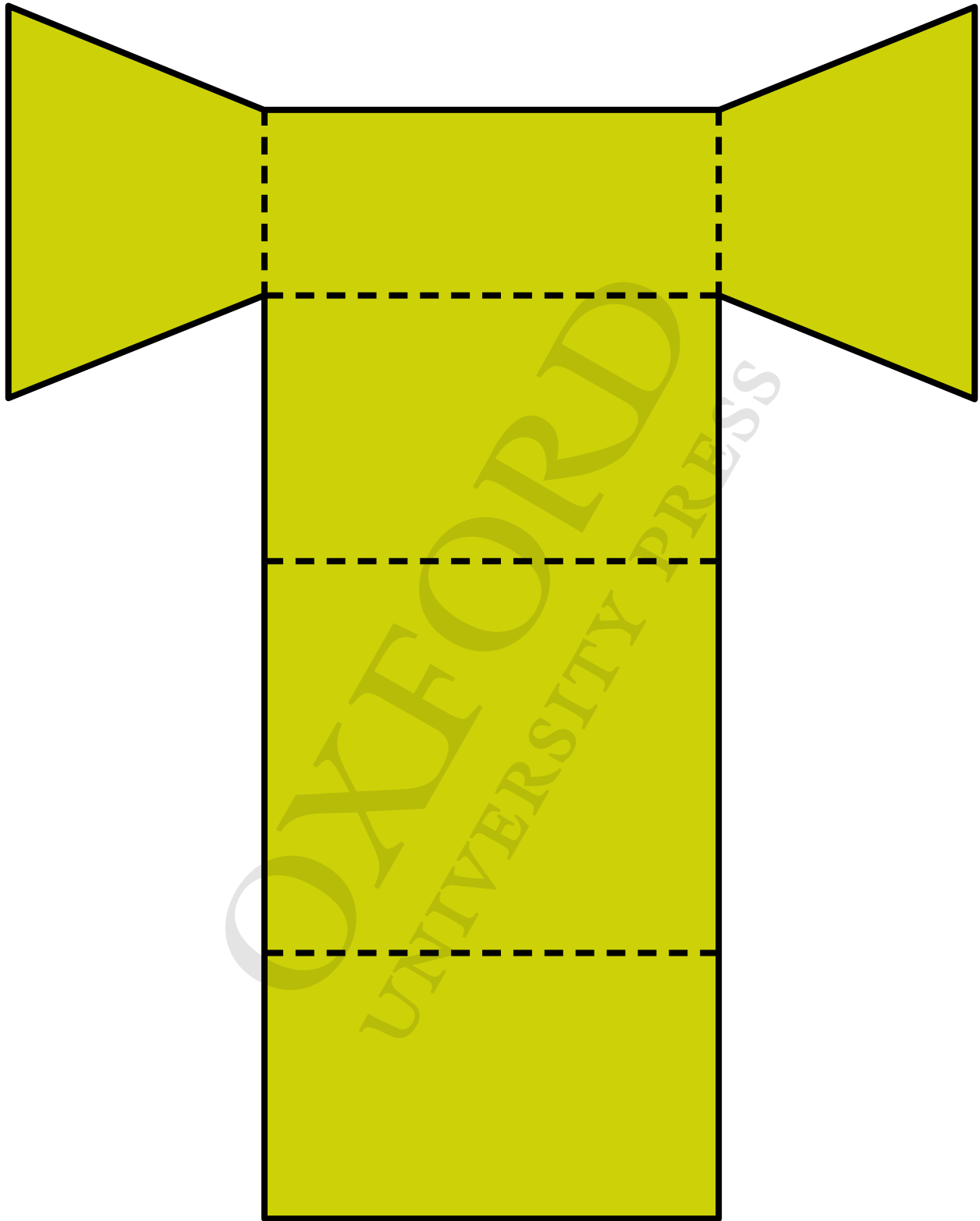
# Net of a Triangular Prism



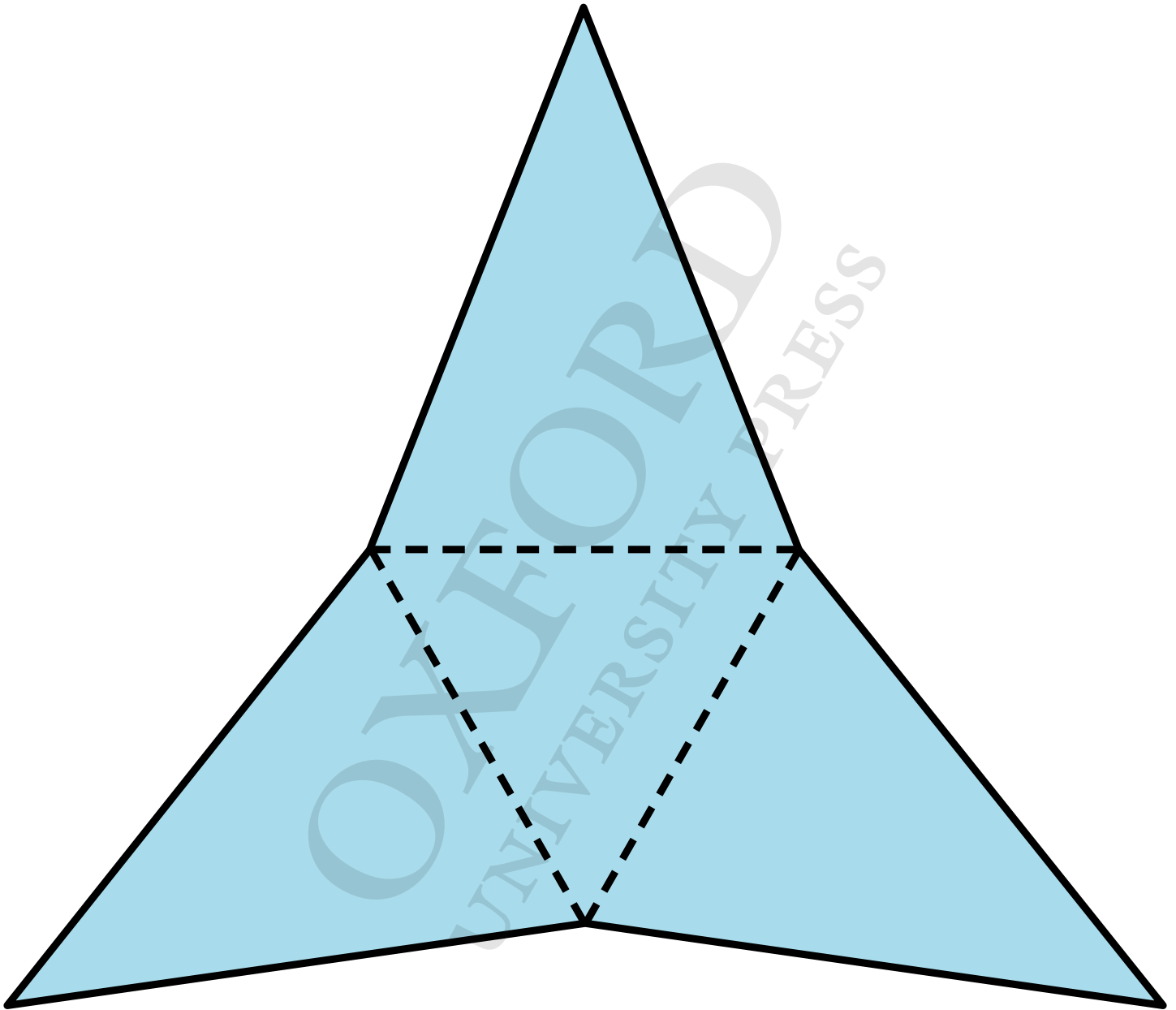
# Net of a Trapezoidal Prism



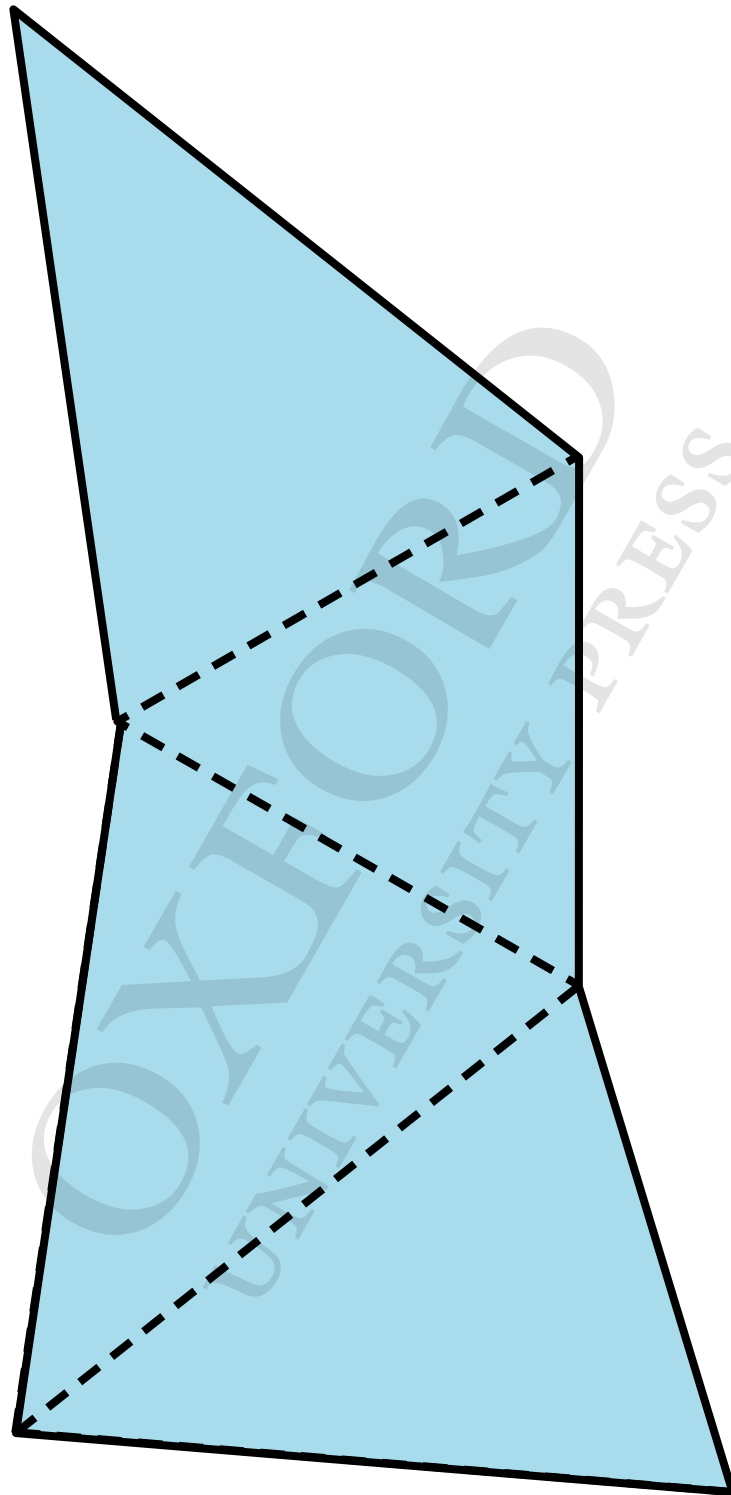
# Net of a Trapezoidal Prism



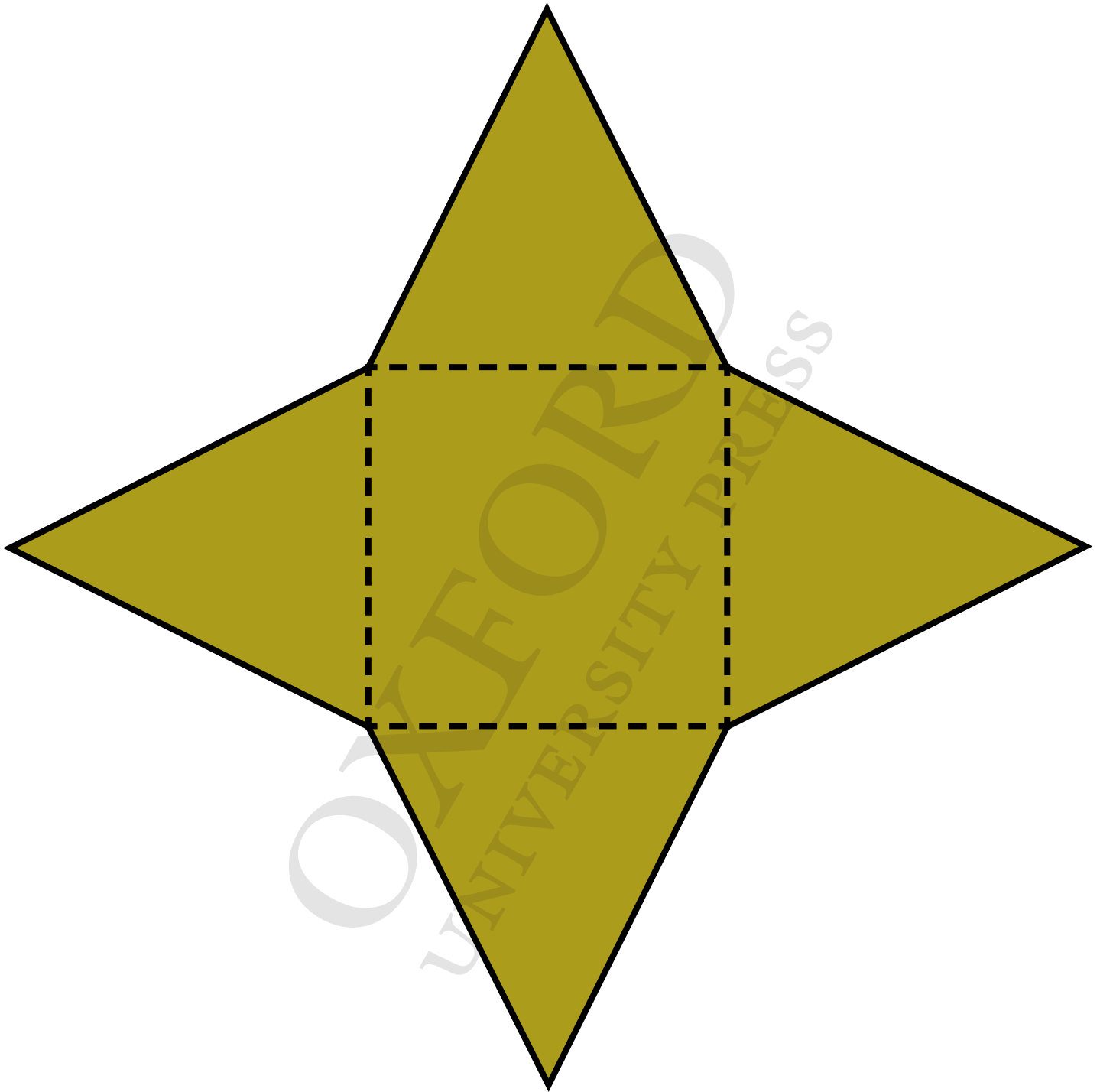
# Net of a Triangular Pyramid



# Net of a Triangular Pyramid



# Net of a Square Pyramid



# Net of a Square Pyramid

