Efofex Teacher Resource Project

Showing the world what we can do, in the most useful way possible.

Area

How Can I Use This Material?

In summary, if you work in a school, you can copy and/or modify it and use it with your students. We hope that this material will help you write your tests, worksheets, exams, presentations and any other educational materials. You cannot claim copyright over the material or present it as your own work.
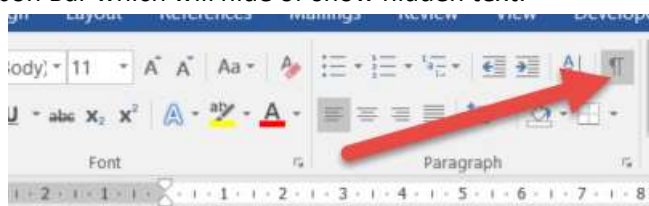
A full Acceptable Use FAQ is available on our website (Acceptable Use FAQ).

How Do I Use The Videos?

1. Copy the link into your web browser.
2. Left clicks have a quiet click sound.
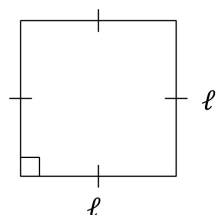3. Right clicks have a loud click sound.

Where Are The Solutions?

Solutions are only available in the Word docx format of the resources. Press this button on the Home Tab of the Ribbon Bar which will hide or show hidden text.

Efofex Teacher Resource Project

Showing the world what we can do, in the most useful way possible.
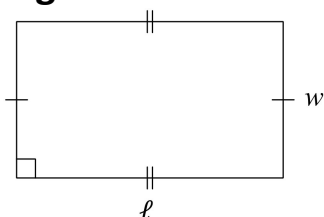
Basic Area Formula Sheet

Square

$A = \ell^2$
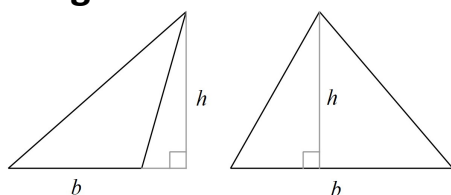
Area = the length of the side squared

Rectangle

$A = \ell \times w$
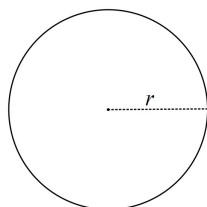
Area = length multiplied by width

Triangle

$A = \dfrac{1}{2}b \times h$

Area = half of the length of the base multiplied by the perpendicular height
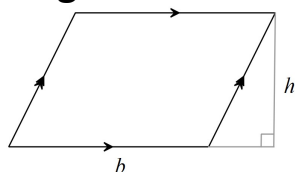
Circle

$A = \pi r^2$

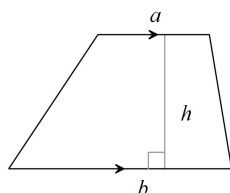Area = pi multiplied by the radius of the circle squared

Parallelogram

$A = b \times h$

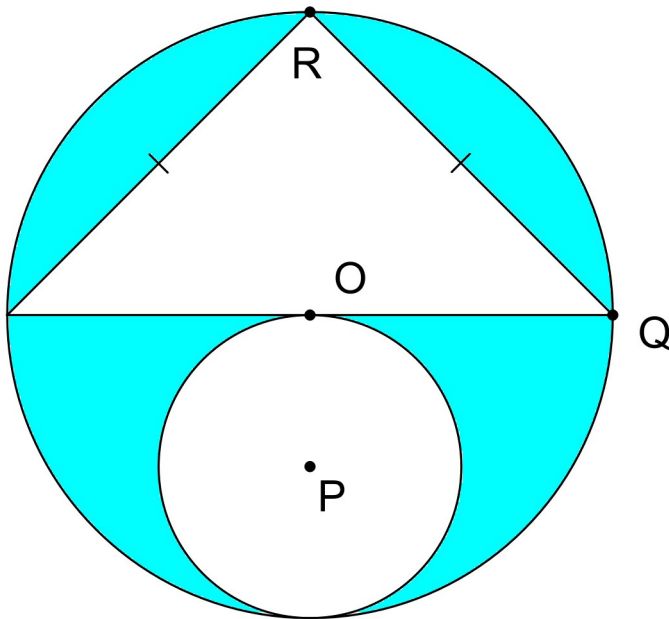Area = the length of the base multiplied by the perpendicular height.

Trapezium

$A = h \times \dfrac{a + b}{2}$

Area = the length of the base multiplied by the perpendicular height.

Efofex Teacher Resource Project

Showing the world what we can do, in the most useful way possible.

Question

Calculate the area of the shaded shape where the radius of the larger circle (OQ) is 10cm.

[4 Marks]

How We Drew The Diagram

http://www.youtube.com/v/8C0Xf-VHEM4&hd=1&autoplay=1

Efofex Teacher Resource Project

Showing the world what we can do, in the most useful way possible.

Question

Calculate the area of this shape

[5 Marks]

Efofex Teacher Resource Project

Showing the world what we can do, in the most useful way possible.
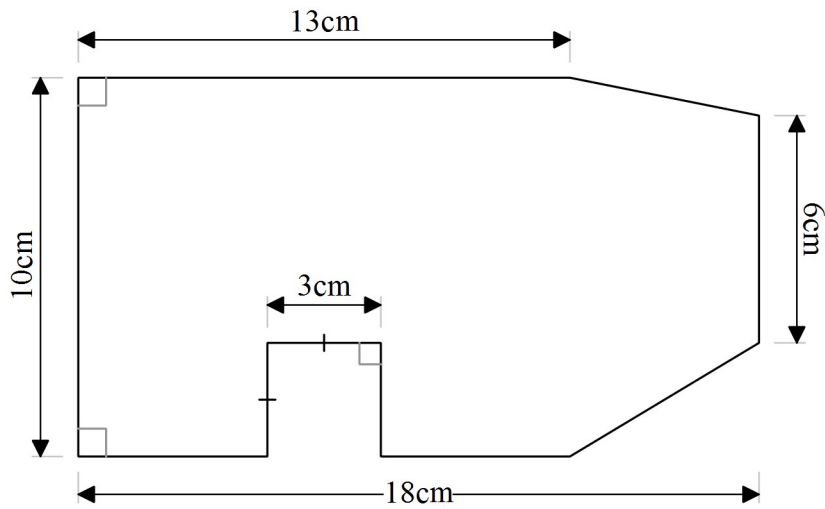
Question

Find the area of this teardrop shape where the 14m side is tangential to the circular arc.

14m

48°

Efofex Teacher Resource Project

Showing the world what we can do, in the most useful way possible.
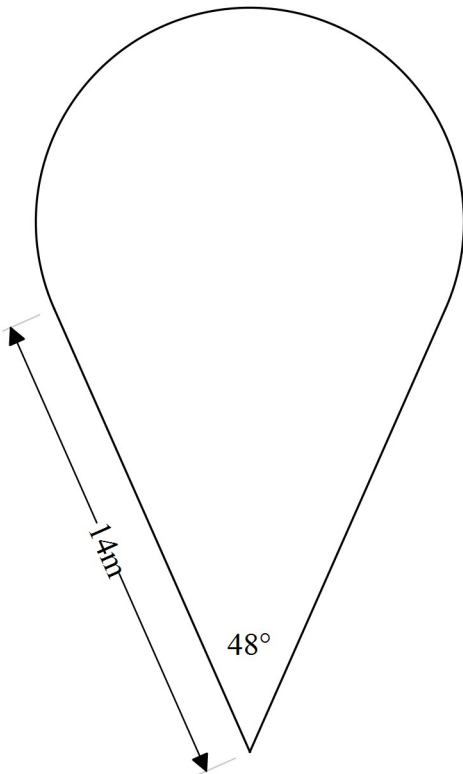
Question

Find the area of the shaded region bounded by these four congruent circles
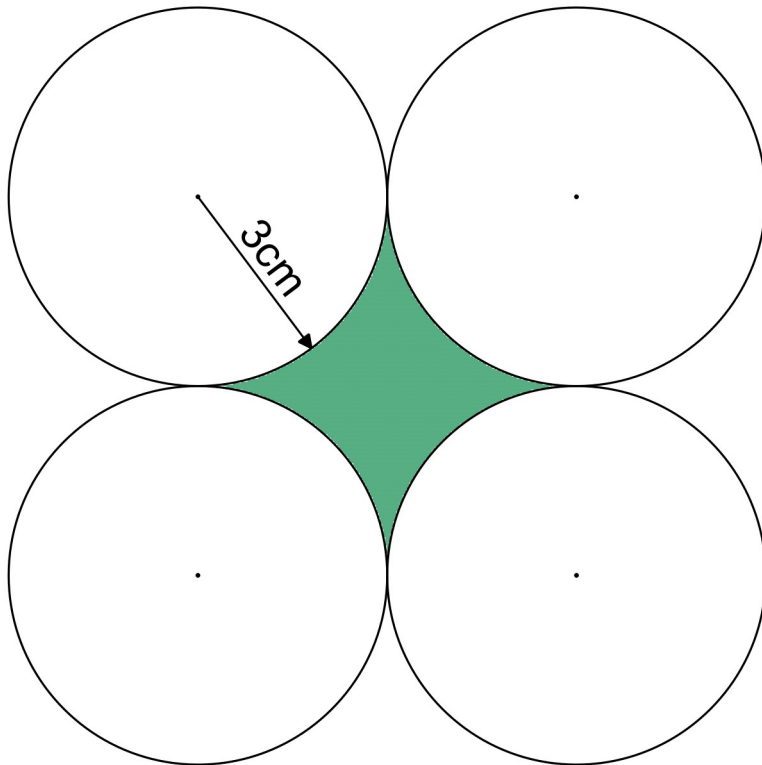
3cm

[4 Marks]

Efofex Teacher Resource Project

Showing the world what we can do, in the most useful way possible.

Question

Find the area of the shaded regions

80mm

[3 Marks]

Efofex Teacher Resource Project

Showing the world what we can do, in the most useful way possible.
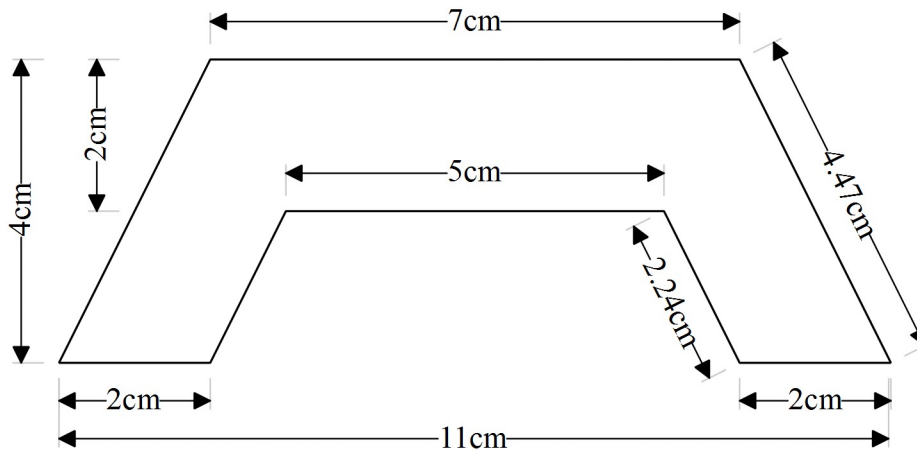
Question

Find the area of this shape. You can assume that sides that appear parallel are parallel.
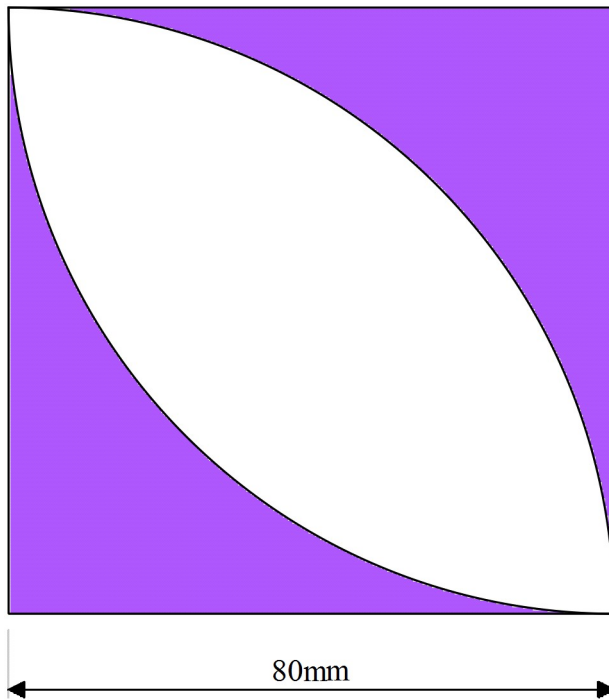
[3 Marks]

How We Drew The Diagram

http://www.youtube.com/v/FsRg7QR1uqI&hd=1&autoplay=1

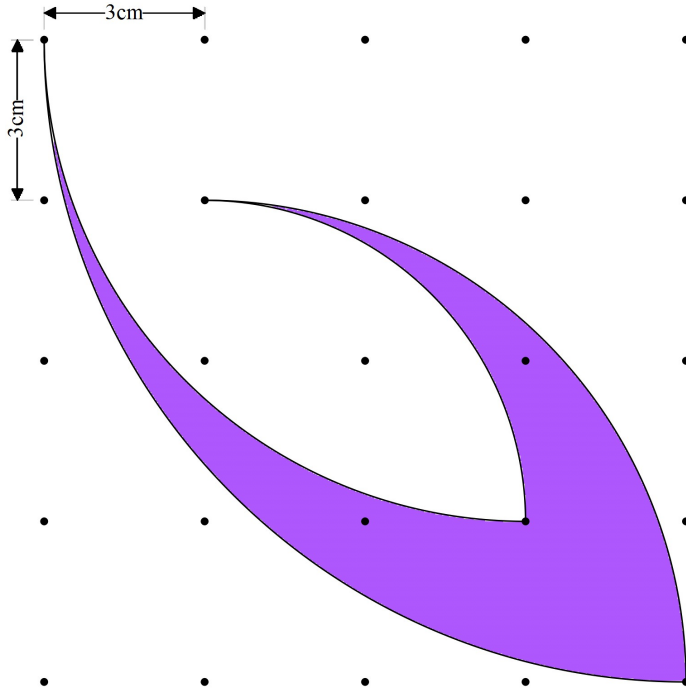# Efofex Teacher Resource Project

Showing the world what we can do, in the most useful way possible.

Question

Find the area of this shape that is defined by quarter circles that have centres and end points that lie on a 3cm grid.

[6 Marks]