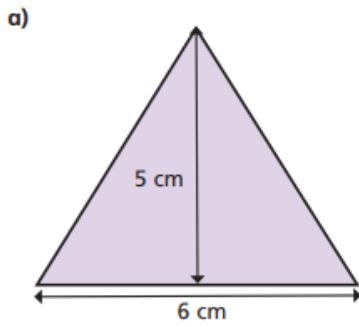


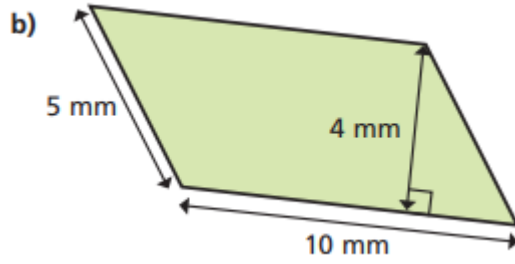
Year 8 Core - Area of trapezia and circles Questions

1.

Work out the areas of the shapes.



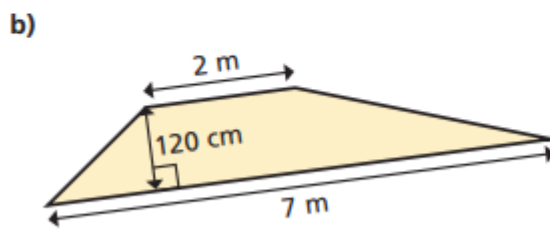
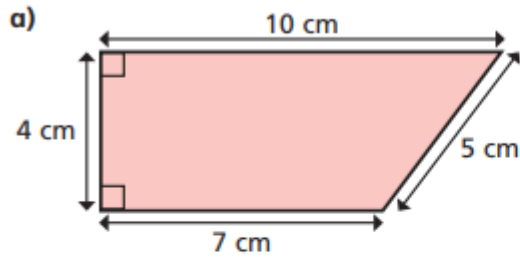
cm²



mm²

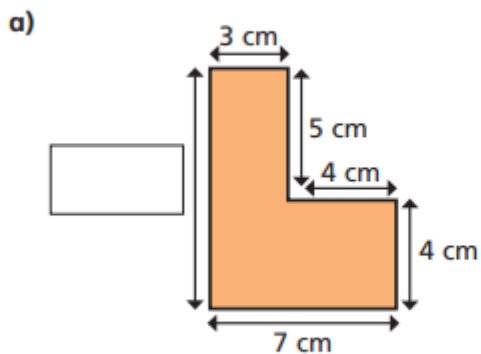
2.

Work out the area of each trapezium.



3.

Work out the unknown lengths and then find the perimeter of each shape.

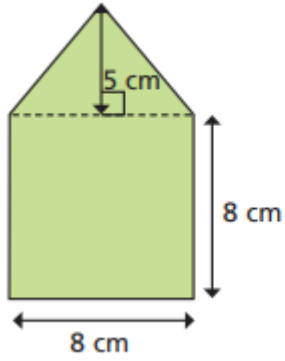


perimeter = cm

4.

Find the area of each compound shape.

a)



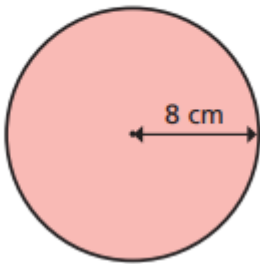
cm²

5.

Find the area of each circle.

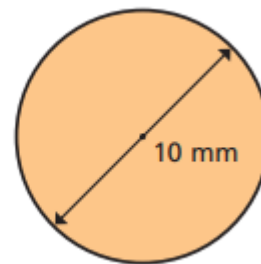
Give your answers in terms of π .

a)



cm²

b)



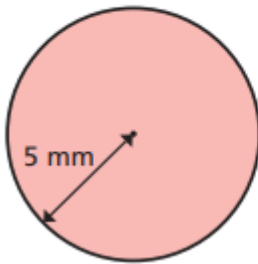
mm²

6.

Find the area of each circle.

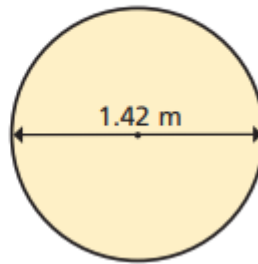
Give your answers to 1 decimal place.

a)



area = mm²

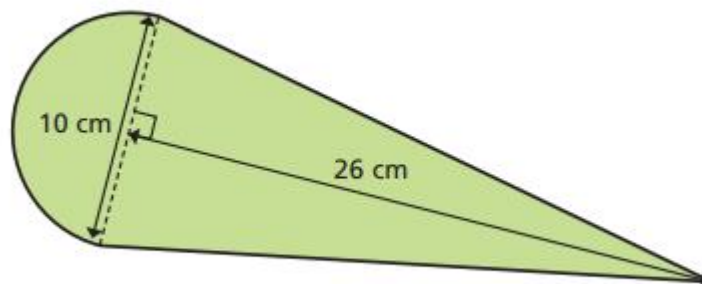
b)



area = m²

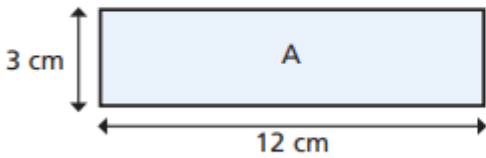
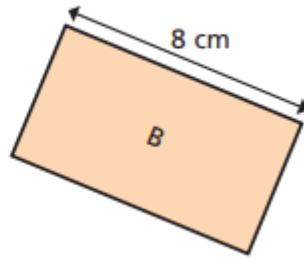
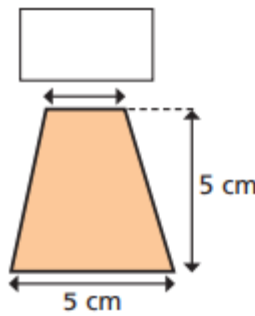
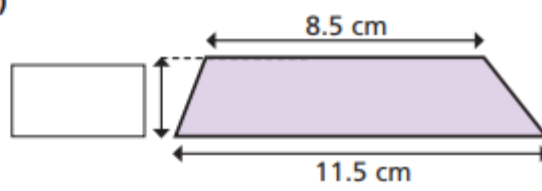
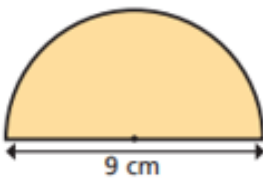
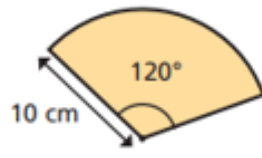
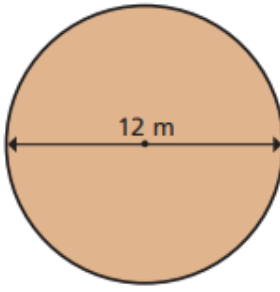
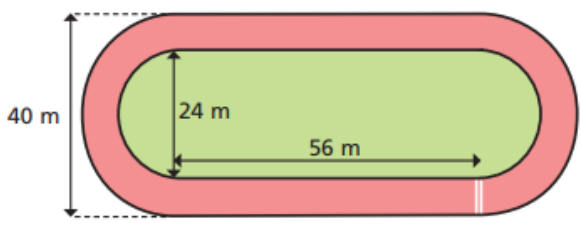
7.

The diagram shows the layout of a field of play for a sporting event.



Find the area of the field of play.

Year 8 Higher - Area of trapezia and circles Questions

1.	<p>The two rectangles have the same area.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>3 cm</p> <p>12 cm</p> <p>A</p> </div> <div style="text-align: center;">  <p>8 cm</p> <p>B</p> </div> </div> <p>Work out the width of rectangle B.</p> <div style="text-align: right; margin-top: 10px;"> <input style="width: 50px; height: 20px;" type="text"/> cm </div>
2.	<p>The area of each trapezium is 20 cm^2 Find and label the missing lengths.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>a)</p>  <p>5 cm</p> <p>5 cm</p> </div> <div style="text-align: center;"> <p>b)</p>  <p>8.5 cm</p> <p>11.5 cm</p> </div> </div>
3.	<p>Work out the area of the parts of circles. Give your answers in terms of π.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>a)</p>  <p>9 cm</p> <p>area = _____ cm^2</p> </div> <div style="text-align: center;"> <p>b)</p>  <p>10 cm</p> <p>120°</p> <p>area = _____ cm^2</p> </div> </div>
4.	<p>Ms Potter is covering a flower bed in compost. The flower bed has a diameter of 12 m. A bag of compost can cover 15 m^2 of garden. How many bags of compost will Ms Potter need?</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;">  <div style="text-align: right; margin-top: 10px;"> <input style="width: 80px; height: 25px;" type="text"/> </div> </div>
5.	<p>The diagram shows the layout of a small running track.</p> <ul style="list-style-type: none"> • Runner A runs around the inside of the track. • Runner B runs around the outside of the track. <p>How much further does Runner B travel?</p> <div style="text-align: right; margin-top: 20px;">  </div>