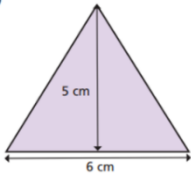
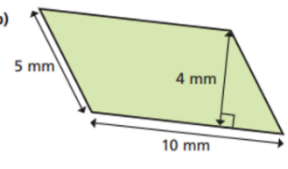
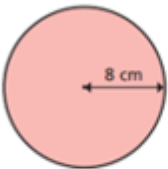
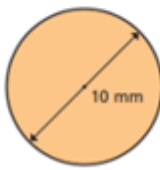
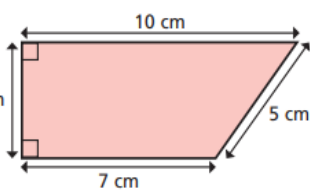
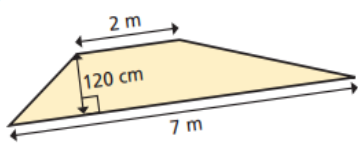
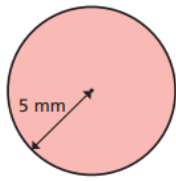
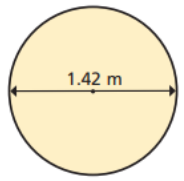
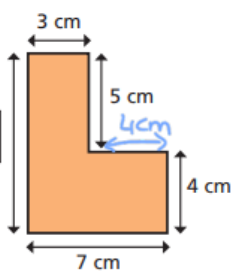
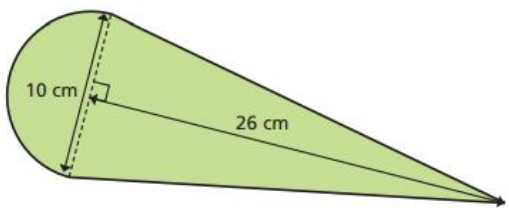
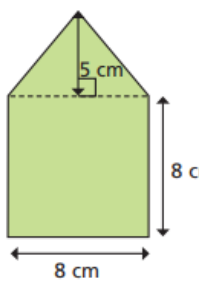


Year 8 Core - Area of trapezia and circles ANSWERS

<p>1</p> <p>Work out the areas of the shapes.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>a)</p>  <p>15 cm²</p> </div> <div style="text-align: center;"> <p>b)</p>  <p>40 mm²</p> </div> </div>	<p>5</p> <p>Find the area of each circle. Give your answers in terms of π.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>a)</p>  <p>area = 64π cm²</p> </div> <div style="text-align: center;"> <p>b)</p>  <p>area = 25π mm²</p> </div> </div>
<p>2</p> <p>Work out the area of each trapezium.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>a)</p>  <p>34 cm²</p> </div> <div style="text-align: center;"> <p>b)</p>  <p>5.4 m²</p> </div> </div>	<p>6</p> <p>Find the area of each circle. Give your answers to 1 decimal place.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>a)</p>  <p>area = 78.5 mm²</p> </div> <div style="text-align: center;"> <p>b)</p>  <p>area = 1.6</p> </div> </div>
<p>3</p> <p>Work out the unknown lengths and then find the perimeter of each shape.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>a)</p>  <p>perimeter = 32 cm</p> </div> </div>	<p>7</p> <p>The diagram shows the layout of a field of play for a sporting event.</p> <div style="text-align: center; margin: 20px 0;">  </div> <p>Find the area of the field of play.</p> <p style="text-align: right;">area = 169.3 cm²</p>
<p>4</p> <p>Find the area of each compound shape.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>a)</p>  <p>84 cm²</p> </div> </div>	

Year 8 Higher - Area of trapezia and circles ANSWERS

1

The two rectangles have the same area.

Work out the width of rectangle B.

4.5 cm

2

The area of each trapezium is 20 cm^2
Find and label the missing lengths.

a) 3 cm

b) 2 cm

3

Work out the area of the parts of circles.
Give your answers in terms of π .

a)

area = $\frac{81}{2}\pi \text{ cm}^2$

b)

area = $\frac{400}{3}\pi \text{ cm}^2$

4

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?

8

5

The diagram shows the layout of a small running track.

- Runner A runs around the inside of the track.
- Runner B runs around the outside of the track.

How much further does Runner B travel?

50.3m