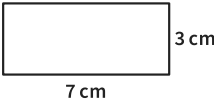
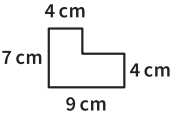
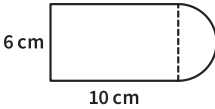
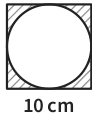
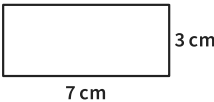
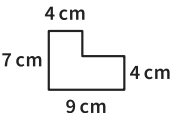
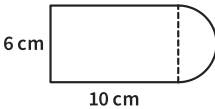
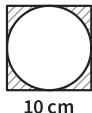


|                                                                                                                                                                                 |                                                                                                                                                                                     |                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>a</b> Find the perimeter</p>  <p><b>20 cm</b></p> <p>perimeter: every side, not two</p>  | <p><b>b</b> Find the perimeter</p>  <p><b>32 cm</b></p> <p>perimeter with missing sides</p>        | <p><b>c</b> Find the circumference of a circle of radius 5 cm, in terms of <math>\pi</math></p> <p><b><math>10\pi</math> cm</b></p> <p>circumference from the radius</p>                                                                     | <p><b>d</b> Find the circumference of a circle of diameter 8 cm, in terms of <math>\pi</math></p> <p><b><math>8\pi</math> cm</b></p> <p>circumference from the diameter</p>                                                                          |
| <p><b>e</b> Find the area of a circle of radius 4 cm, in terms of <math>\pi</math></p> <p><b><math>16\pi</math> cm<sup>2</sup></b></p> <p>area of a circle from the radius</p>  | <p><b>f</b> Find the area of a circle of diameter 10 cm, in terms of <math>\pi</math></p> <p><b><math>25\pi</math> cm<sup>2</sup></b></p> <p>area of a circle from the diameter</p> | <p><b>g</b> Find the area of a semicircle of radius 6 cm, in terms of <math>\pi</math></p> <p><b><math>18\pi</math> cm<sup>2</sup></b></p> <p>area of a semicircle</p>                                                                       | <p><b>h</b> Find the perimeter of a semicircle of diameter 10 cm, in terms of <math>\pi</math></p> <p><b><math>5\pi + 10</math> cm</b></p> <p>perimeter of a semicircle: the diameter</p>                                                            |
| <p><b>i</b> Find the perimeter of a quarter circle of radius 4 cm, in terms of <math>\pi</math></p> <p><b><math>2\pi + 8</math> cm</b></p> <p>perimeter of a quarter circle</p> | <p><b>j</b> A circle has area <math>36\pi</math> cm<sup>2</sup>. Find its radius</p> <p><b>6 cm</b></p> <p>radius from the area</p>                                                 | <p><b>k</b> Find the area in terms of <math>\pi</math></p>  <p><b><math>60 + 4.5\pi</math> cm<sup>2</sup></b></p> <p>area of a shape with a semicircle</p> | <p><b>l</b> Find the shaded area in terms of <math>\pi</math></p>  <p><b><math>100 - 25\pi</math> cm<sup>2</sup></b></p> <p>shaded area: taking a circle away</p> |

|                                                                                                                                                                                  |                                                                                                                                                                                     |                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>a</b> Find the perimeter</p>  <p><b>20 cm</b></p> <p>perimeter: every side, not two</p> | <p><b>b</b> Find the perimeter</p>  <p><b>32 cm</b></p> <p>perimeter with missing sides</p>      | <p><b>c</b> Find the circumference of a circle of radius 5 cm, in terms of <math>\pi</math></p> <p><b><math>10\pi</math> cm</b></p> <p>circumference from the radius</p>                                                                       | <p><b>d</b> Find the circumference of a circle of diameter 8 cm, in terms of <math>\pi</math></p> <p><b><math>8\pi</math> cm</b></p> <p>circumference from the diameter</p>                                                                            |
| <p><b>e</b> Find the area of a circle of radius 4 cm, in terms of <math>\pi</math></p> <p><b><math>16\pi</math> cm<sup>2</sup></b></p> <p>area of a circle from the radius</p>   | <p><b>f</b> Find the area of a circle of diameter 10 cm, in terms of <math>\pi</math></p> <p><b><math>25\pi</math> cm<sup>2</sup></b></p> <p>area of a circle from the diameter</p> | <p><b>g</b> Find the area of a semicircle of radius 6 cm, in terms of <math>\pi</math></p> <p><b><math>18\pi</math> cm<sup>2</sup></b></p> <p>area of a semicircle</p>                                                                         | <p><b>h</b> Find the perimeter of a semicircle of diameter 10 cm, in terms of <math>\pi</math></p> <p><b><math>5\pi + 10</math> cm</b></p> <p>perimeter of a semicircle: the diameter</p>                                                              |
| <p><b>i</b> Find the perimeter of a quarter circle of radius 4 cm, in terms of <math>\pi</math></p> <p><b><math>2\pi + 8</math> cm</b></p> <p>perimeter of a quarter circle</p>  | <p><b>j</b> A circle has area <math>36\pi</math> cm<sup>2</sup>. Find its radius</p> <p><b>6 cm</b></p> <p>radius from the area</p>                                                 | <p><b>k</b> Find the area in terms of <math>\pi</math></p>  <p><b><math>60 + 4.5\pi</math> cm<sup>2</sup></b></p> <p>area of a shape with a semicircle</p> | <p><b>l</b> Find the shaded area in terms of <math>\pi</math></p>  <p><b><math>100 - 25\pi</math> cm<sup>2</sup></b></p> <p>shaded area: taking a circle away</p> |