



The Area.

Circles 2.

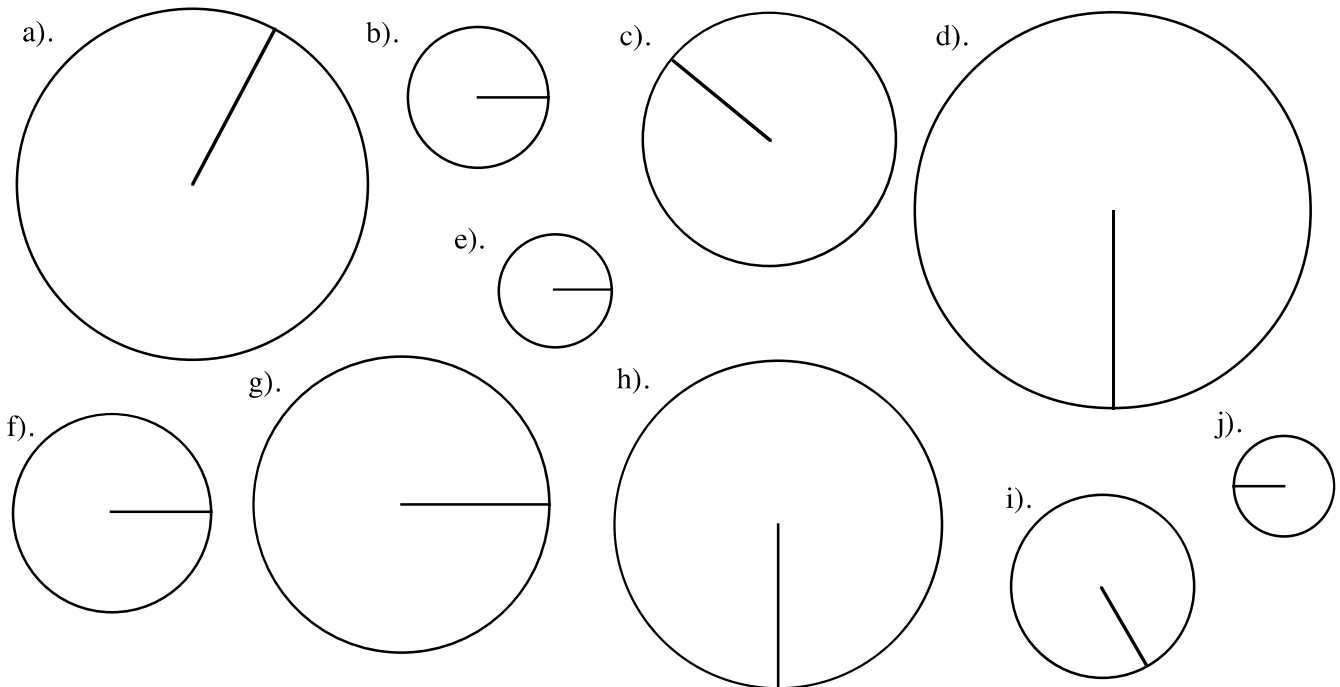


$$\text{Area} = \pi \times \text{radius} \times \text{radius}$$

$$A = \pi r^2$$

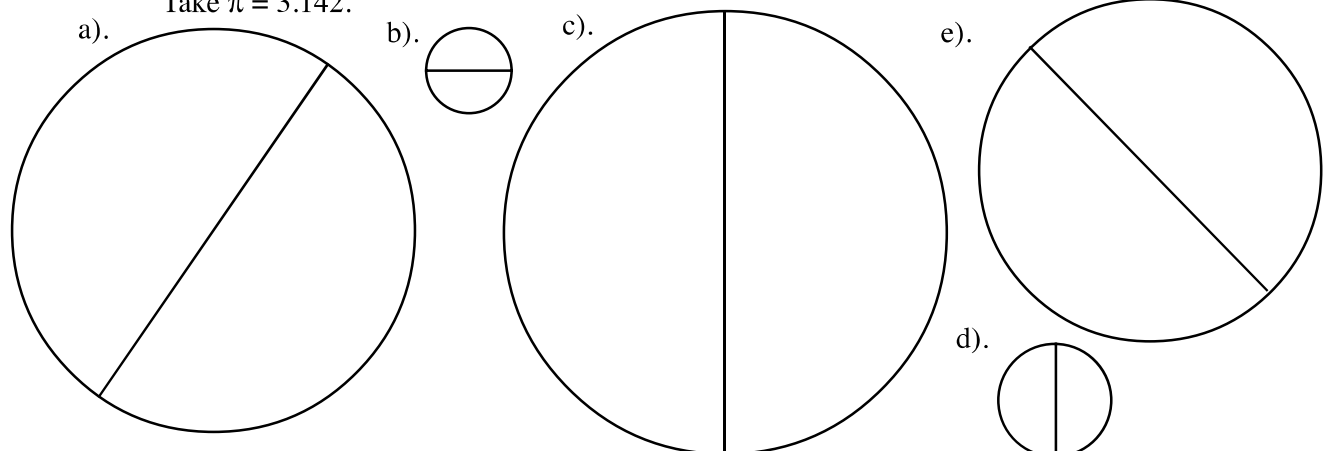
- 1). Use $\pi = 3.14$. Calculate the area of the circle to 2 d.p., if the **radius** is :
- | | | | | |
|--------------|-------------|-------------|-------------|------------|
| a). 10 cm | b). 25 cm | c). 66 cm | d). 72 cm | e). 0.5 cm |
| f). 9 Km | g). 6.5 mm | h). 90.2 Km | i). 45 m | j). 550 m |
| k). 30.55 mm | l). 2.01 cm | m). 2.5 Km | n). 405 Km | o). 80 mm |
| p). 23 cm | q). 4.5 Km | r). 3.25 m | s). 0.75 cm | t). 4.25 m |

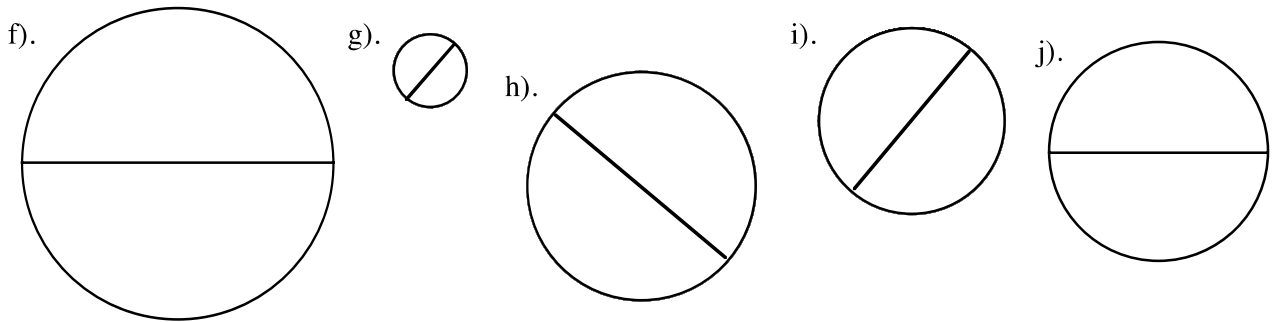
- 2). Measure the radii of each of these circles and calculate their areas to 1 d.p.. Take $\pi = 3.14$.



- 3). Calculate the area of the circle to 2 d.p., using the π button, if the **diameter** is :
- | | | | | |
|-------------|---------------|--------------|-------------|------------------|
| a). 30 mm | b). 26 cm | c). 88 m | d). 120 cm | e). 256 Km |
| f). 2500 Km | g). 84.6 mm | h). 0.2 Km | i). 48.4 m | j). 32.5 m |
| k). 0.1 mm | l). 6 cm | m). 220 Km | n). 50 Km | o). 43 mm |
| p). 8 ft | q). 5.5 miles | r). 22.25 ft | s). 7.5 yds | t). 2000 inches. |

- 4). Measure the diameters of each of these circles and calculate their areas to 1 d.p..
Take $\pi = 3.142$.



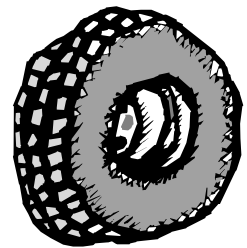


- 5). Find the area of the following circles. Take $\pi = 3.14$. Leave the answer to 3 sig. figs..
- a). radius = 7 cm b). radius = 28 m c). radius = 1.4 Km d). radius = 5.6 m
 e). diam. = 28 m f). diam. = 112 mm g). diam. = 84 cm h). diam. = 3.5 m
 i). radius = 490 m j). radius = 0.49cm k). diam. = 7 mm l). diam. 24.5 Km
 m). radius = 1.75 cm n). diam. = 168 Km o). radius = 1.33 m p). diam. = 119 yds
 q). radius = 0.28 m r). radius = 3500 ft s). diam. = 0.47 m t). radius = 630 miles.

For the following questions use calculator π and leave answers to a sensible degree of accuracy.

- 6). The minute hand on a watch is 2.5 cm long. Over what area does this hand travel in 1 hour ?
- 7). A farmer has a circular field which is 170 metres across. He wishes to cover it with plastic sheeting. What area of sheeting does he require ?

- 8). A circular table is 1.8 metres across. What is the area of the table top ?
- 9). Rover is tied to a post in the middle of the garden with a rope 12 ft long. On what area of the garden can poor little Rover walk ?



- 10). By measuring, what is the area in cm^2 of one side of a
 a). £1 coin b). 10p coin c). 5p coin d). 2p coin e). 1p coin ?

- 11). The following shapes are made up of full circles, semi-circles or quarter circles. Find the area of each of the following shapes.

