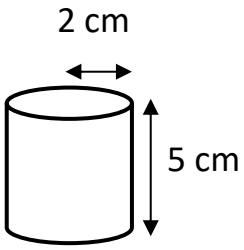
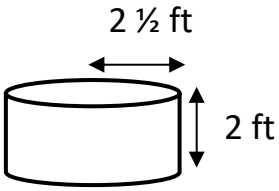
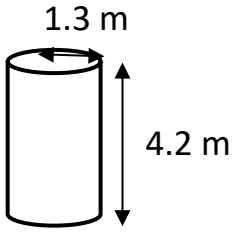
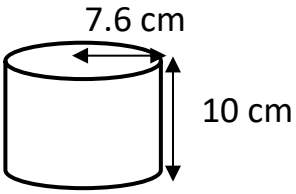
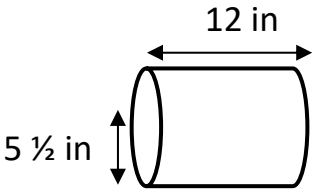
Name Date

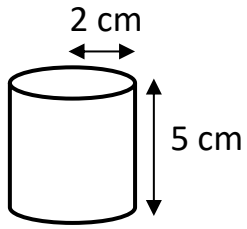
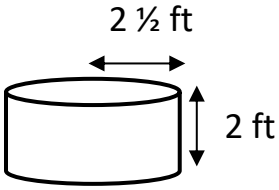
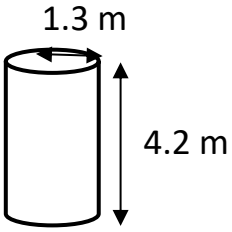
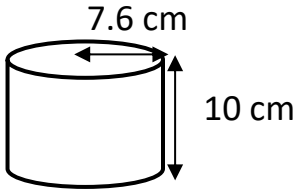
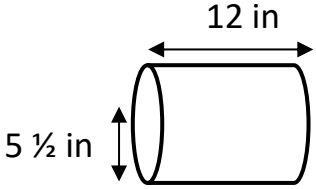
# VOLUME OF A CYLINDER SHEET 1

*Use the radius and height measurements to find the volume of these closed cylinders.*
*Give your answers to 2 decimal places.*

| CYLINDER | WORKING OUT | VOLUME |
|---|---|---|
| 1)   | | |
| 2)   | | |
| 3)   | | |
| 4)   | | |
| 5)   | | |

Name Date

# VOLUME OF A CYLINDER SHEET 1 ANSWERS

| | CYLINDER | WORKING OUT | VOLUME |
|---|---|---|---|
| 1) |   | Cylinder volume = $\pi r^2 h$<br>= $\pi \cdot 2^2 \cdot 5 = \pi \cdot 4 \cdot 5 = 20\pi$<br>= 62.83 $cm^3$ to 2 decimal places | 62.83 $cm^3$ |
| 2) |   | Cylinder volume = $\pi r^2 h$<br>= $\pi \cdot (2\ ½)^2 \cdot 2 = \pi \cdot 6\ ¼ \cdot 2$<br>= 12 ½ $\pi$<br>= 39.27 $ft^3$ to 2 decimal places | 39.27 $ft^3$ |
| 3) |   | Cylinder volume = $\pi r^2 h$<br>= $\pi \cdot (1.3)^2 \cdot 4.2 = \pi \cdot 1.69 \cdot 4.2$<br>= 7.098 $\pi$<br>= 22.30 $m^3$ to 2 decimal places | 22.30 $m^3$ |
| 4) |   | Cylinder volume = $\pi r^2 h$<br>= $\pi \cdot (7.6)^2 \cdot 10$<br>= $\pi \cdot 57.76 \cdot 10$<br>= 577.6 $\pi$<br>= 1814.58 $cm^3$ to 2 dp | 1814.58 $cm^3$ |
| 5) |   | Cylinder volume = $\pi r^2 h$<br>= $\pi \cdot (5\ ½)^2 \cdot 12$<br>= $\pi \cdot 30\ ¼ \cdot 12$<br>= 363 $\pi$<br>= 1140.40 $in^3$ to 2 dp | 1140.40 $in^3$ |