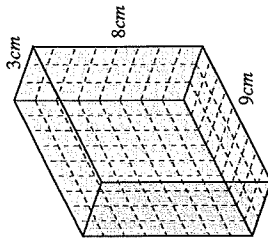
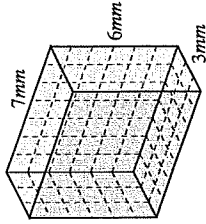


Volume and surface area of prisms (C)

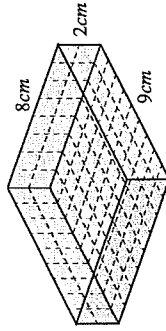
Find the volume and surface area of each prism.



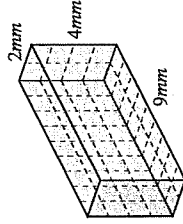
V: _____
SA: _____



V: _____
SA: _____



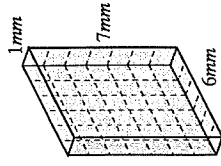
V: _____
SA: _____



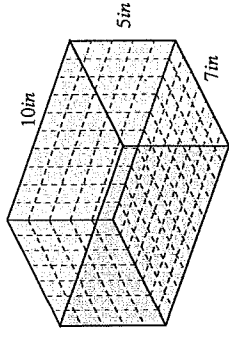
V: _____
SA: _____

Volume and surface area of prisms (D)

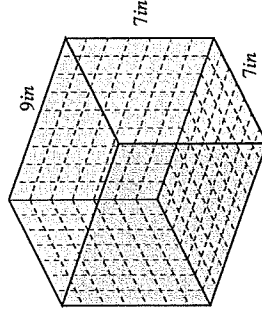
Find the volume and surface area of each prism.



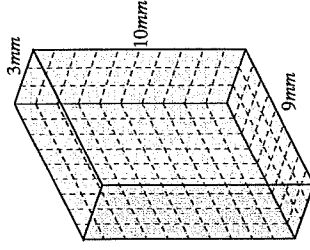
V: _____
SA: _____



V: _____
SA: _____



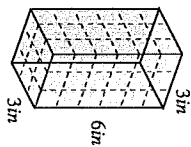
V: _____
SA: _____



V: _____
SA: _____

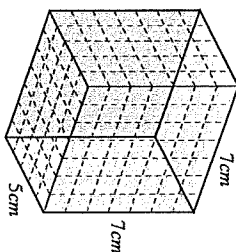
Volume and surface area of prisms (A)

Find the volume and surface area of each prism.



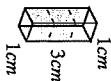
V: _____

SA: _____



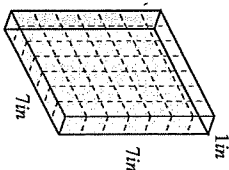
V: _____

SA: _____



V: _____

SA: _____

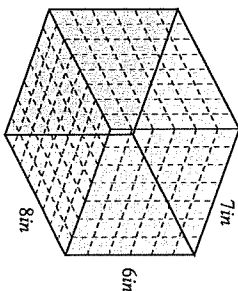


V: _____

SA: _____

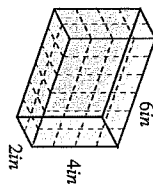
Volume and surface area of prisms (B)

Find the volume and surface area of each prism.



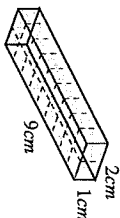
V: _____

SA: _____



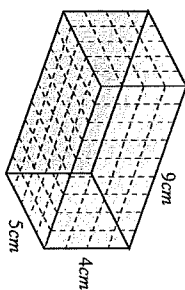
V: _____

SA: _____



V: _____

SA: _____



V: _____

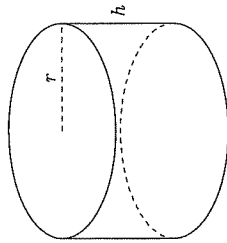
SA: _____

Area and Volume of Cylinders (C)

Calculate the surface area and volume for each cylinder.

Surface Area = $(\pi r^2 \times 2) + (\pi d \times h)$ Volume = $\pi r^2 \times h$ $d = 2r$

1.

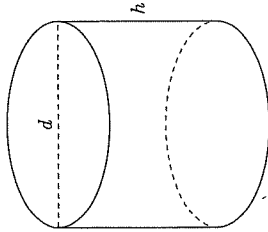


$r = 2.3$ nm $h = 2.4$ nm

Surface Area =

Volume =

2.

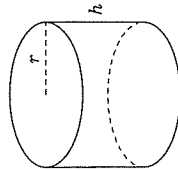


$d = 26.4$ yd $h = 20.4$ yd

Surface Area =

Volume =

3.

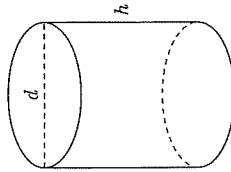


$r = 7.75$ m $h = 10.5$ m

Surface Area =

Volume =

4.



$d = 27.9$ yd $h = 29.7$ yd

Surface Area =

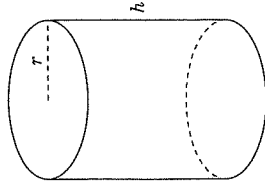
Volume =

Area and Volume of Cylinders (D)

Calculate the surface area and volume for each cylinder.

Surface Area = $(\pi r^2 \times 2) + (\pi d \times h)$ Volume = $\pi r^2 \times h$ $d = 2r$

1.

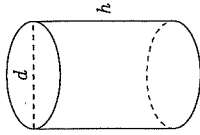


$r = 8.5$ nm $h = 19$ nm

Surface Area =

Volume =

2.

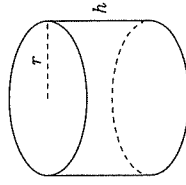


$d = 4.6$ in $h = 6$ in

Surface Area =

Volume =

3.

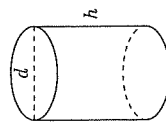


$r = 6.6$ yd $h = 8.8$ yd

Surface Area =

Volume =

4.



$d = 10$ cm $h = 12$ cm

Surface Area =

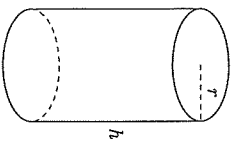
Volume =

Area and Volume of Cylinders (A)

Calculate the surface area and volume for each cylinder.

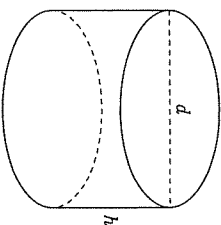
Surface Area = $(\pi r^2 \times 2) + (\pi d \times h)$ Volume = $\pi r^2 \times h$ $d = 2r$

1.



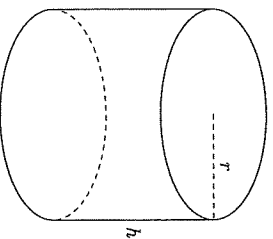
$r = 1.2$ km $h = 3.6$ km
Surface Area =
Volume =

2.



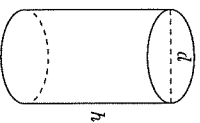
$d = 12.6$ cm $h = 7.5$ cm
Surface Area =
Volume =

3.



$r = 18$ ft $h = 27.2$ ft
Surface Area =
Volume =

4.



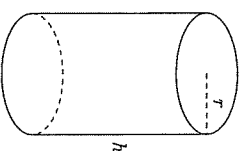
$d = 12$ m $h = 18.6$ m
Surface Area =
Volume =

Area and Volume of Cylinders (B)

Calculate the surface area and volume for each cylinder.

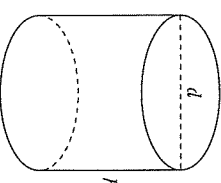
Surface Area = $(\pi r^2 \times 2) + (\pi d \times h)$ Volume = $\pi r^2 \times h$ $d = 2r$

1.



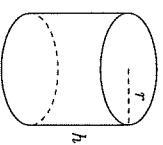
$r = 9.1$ mm $h = 25.9$ mm
Surface Area =
Volume =

2.



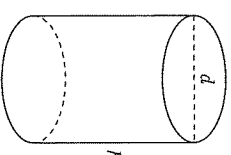
$d = 16.5$ cm $h = 15$ cm
Surface Area =
Volume =

3.



$r = 7.2$ mm $h = 12.6$ mm
Surface Area =
Volume =

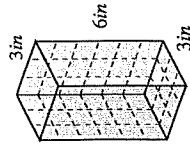
4.



$d = 24.3$ mm $h = 30.6$ mm
Surface Area =
Volume =

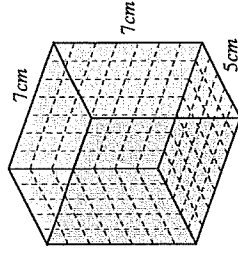
Volume and surface area of prisms (A) Answers

Find the volume and surface area of each prism.



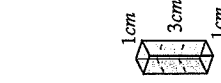
$$V: 3\text{ in} \times 3 \times 6\text{ in} = 54\text{ in}^3$$

$$SA: 2 \times (9 + 18 + 18)\text{ in} = 90\text{ in}^2$$



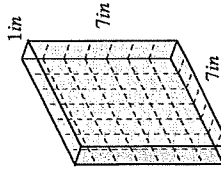
$$V: 5\text{ cm} \times 7 \times 7\text{ cm} = 245\text{ cm}^3$$

$$SA: 2 \times (35 + 49 + 35)\text{ cm} = 238\text{ cm}^2$$



$$V: 1\text{ cm} \times 1 \times 3\text{ cm} = 3\text{ cm}^3$$

$$SA: 2 \times (1 + 3 + 3)\text{ cm} = 14\text{ cm}^2$$

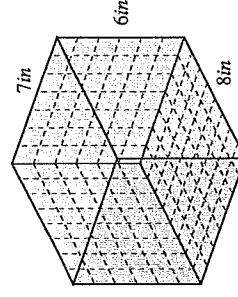


$$V: 7\text{ in} \times 1 \times 7\text{ in} = 49\text{ in}^3$$

$$SA: 2 \times (7 + 7 + 49)\text{ in} = 126\text{ in}^2$$

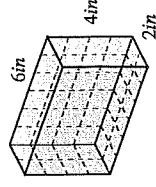
Volume and surface area of prisms (B) Answers

Find the volume and surface area of each prism.



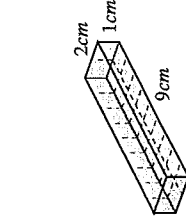
$$V: 8\text{ in} \times 7 \times 6\text{ in} = 336\text{ in}^3$$

$$SA: 2 \times (56 + 42 + 48)\text{ in} = 292\text{ in}^2$$



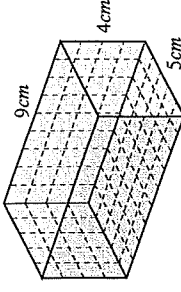
$$V: 2\text{ in} \times 6 \times 4\text{ in} = 48\text{ in}^3$$

$$SA: 2 \times (12 + 24 + 8)\text{ in} = 88\text{ in}^2$$



$$V: 9\text{ cm} \times 2 \times 1\text{ cm} = 18\text{ cm}^3$$

$$SA: 2 \times (18 + 2 + 9)\text{ cm} = 58\text{ cm}^2$$

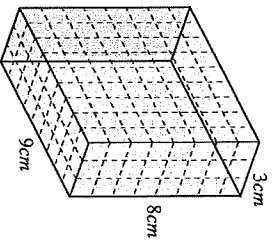


$$V: 5\text{ cm} \times 9 \times 4\text{ cm} = 180\text{ cm}^3$$

$$SA: 2 \times (45 + 36 + 20)\text{ cm} = 202\text{ cm}^2$$

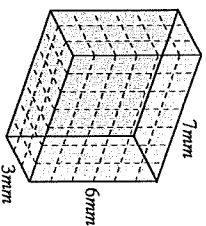
Volume and surface area of prisms (C) Answers

Find the volume and surface area of each prism.



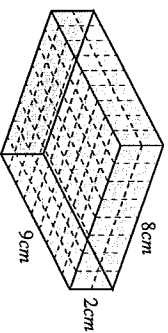
$$V: 9\text{ cm} \times 3 \times 8\text{ cm} = 216\text{ cm}^3$$

$$SA: 2 \times (27 + 24 + 72)\text{ cm} = 246\text{ cm}^2$$



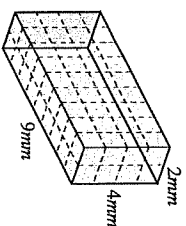
$$V: 3\text{ mm} \times 7 \times 6\text{ mm} = 126\text{ mm}^3$$

$$SA: 2 \times (21 + 42 + 18)\text{ mm} = 162\text{ mm}^2$$



$$V: 9\text{ cm} \times 8 \times 2\text{ cm} = 144\text{ cm}^3$$

$$SA: 2 \times (72 + 16 + 18)\text{ cm} = 212\text{ cm}^2$$

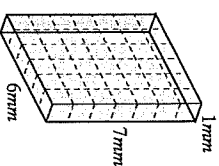


$$V: 9\text{ mm} \times 2 \times 4\text{ mm} = 72\text{ mm}^3$$

$$SA: 2 \times (18 + 8 + 36)\text{ mm} = 124\text{ mm}^2$$

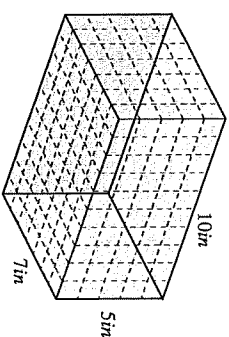
Volume and surface area of prisms (D) Answers

Find the volume and surface area of each prism.



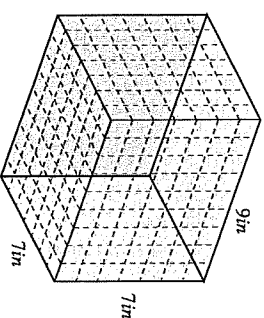
$$V: 6\text{ mm} \times 1 \times 7\text{ mm} = 42\text{ mm}^3$$

$$SA: 2 \times (6 + 7 + 42)\text{ mm} = 110\text{ mm}^2$$



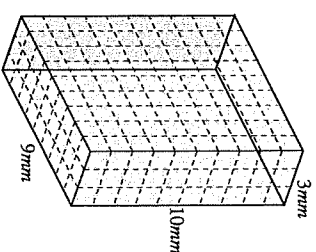
$$V: 7\text{ in} \times 10 \times 5\text{ in} = 350\text{ in}^3$$

$$SA: 2 \times (70 + 50 + 35)\text{ in} = 310\text{ in}^2$$



$$V: 7\text{ in} \times 9 \times 7\text{ in} = 441\text{ in}^3$$

$$SA: 2 \times (63 + 63 + 49)\text{ in} = 350\text{ in}^2$$



$$V: 9\text{ mm} \times 3 \times 10\text{ mm} = 270\text{ mm}^3$$

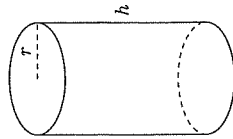
$$SA: 2 \times (27 + 30 + 90)\text{ mm} = 294\text{ mm}^2$$

Area and Volume of Cylinders (A) Answers

Calculate the surface area and volume for each cylinder.

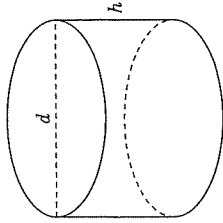
Surface Area = $(\pi r^2 \times 2) + (\pi d \times h)$ Volume = $\pi r^2 \times h$ $d = 2r$

1.



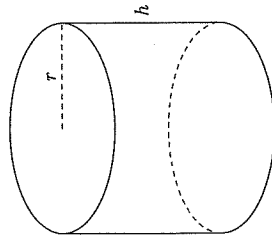
$r = 1.2 \text{ km}$ $h = 3.6 \text{ km}$
 Surface Area = 36.19 km^2
 Volume = 16.29 km^3

2.



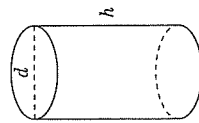
$d = 12.6 \text{ cm}$ $h = 7.5 \text{ cm}$
 Surface Area = 546.26 cm^2
 Volume = 935.17 cm^3

3.



$r = 18 \text{ ft}$ $h = 27.2 \text{ ft}$
 Surface Area = 5112 ft^2
 Volume = $27,686.23 \text{ ft}^3$

4.



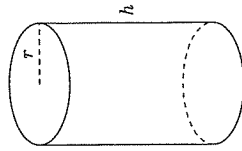
$d = 12 \text{ m}$ $h = 18.6 \text{ m}$
 Surface Area = 927.4 m^2
 Volume = 2103.61 m^3

Area and Volume of Cylinders (B) Answers

Calculate the surface area and volume for each cylinder.

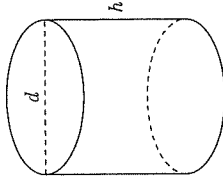
Surface Area = $(\pi r^2 \times 2) + (\pi d \times h)$ Volume = $\pi r^2 \times h$ $d = 2r$

1.



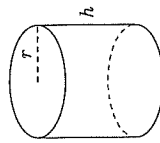
$r = 9.1 \text{ mm}$ $h = 25.9 \text{ mm}$
 Surface Area = 2001.19 mm^2
 Volume = 6738.02 mm^3

2.



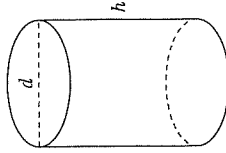
$d = 16.5 \text{ cm}$ $h = 15 \text{ cm}$
 Surface Area = 1205.19 cm^2
 Volume = 3207.37 cm^3

3.



$r = 7.2 \text{ mm}$ $h = 12.6 \text{ mm}$
 Surface Area = 895.73 mm^2
 Volume = 2052.04 mm^3

4.



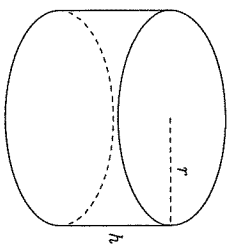
$d = 24.3 \text{ nm}$ $h = 30.6 \text{ nm}$
 Surface Area = 3263.56 nm^2
 Volume = $14,191.35 \text{ nm}^3$

Area and Volume of Cylinders (C) Answers

Calculate the surface area and volume for each cylinder.

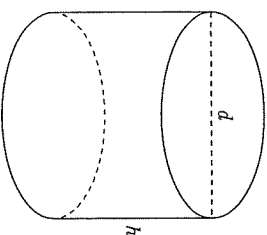
$$\text{Surface Area} = (\pi r^2 \times 2) + (\pi d \times h) \quad \text{Volume} = \pi r^2 \times h \quad d = 2r$$

1.



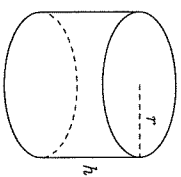
$$\begin{aligned} r &= 2.3 \text{ nm} & h &= 2.4 \text{ nm} \\ \text{Surface Area} &= 67.92 \text{ nm}^2 \\ \text{Volume} &= 39.89 \text{ nm}^3 \end{aligned}$$

2.



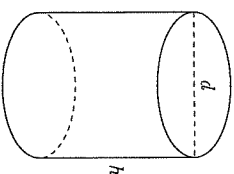
$$\begin{aligned} d &= 26.4 \text{ yd} & h &= 20.4 \text{ yd} \\ \text{Surface Area} &= 2786.72 \text{ yd}^2 \\ \text{Volume} &= 11,166.78 \text{ yd}^3 \end{aligned}$$

3.



$$\begin{aligned} r &= 7.75 \text{ m} & h &= 10.5 \text{ m} \\ \text{Surface Area} &= 888.68 \text{ m}^2 \\ \text{Volume} &= 1981.27 \text{ m}^3 \end{aligned}$$

4.



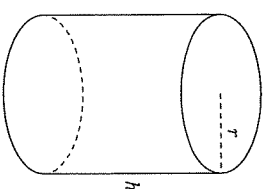
$$\begin{aligned} d &= 27.9 \text{ yd} & h &= 29.7 \text{ yd} \\ \text{Surface Area} &= 3825.94 \text{ yd}^2 \\ \text{Volume} &= 18,157.44 \text{ yd}^3 \end{aligned}$$

Area and Volume of Cylinders (D) Answers

Calculate the surface area and volume for each cylinder.

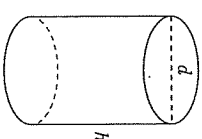
$$\text{Surface Area} = (\pi r^2 \times 2) + (\pi d \times h) \quad \text{Volume} = \pi r^2 \times h \quad d = 2r$$

1.



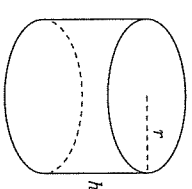
$$\begin{aligned} r &= 8.5 \text{ nm} & h &= 19 \text{ nm} \\ \text{Surface Area} &= 1468.69 \text{ nm}^2 \\ \text{Volume} &= 4312.62 \text{ nm}^3 \end{aligned}$$

2.



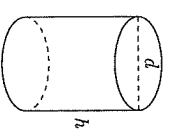
$$\begin{aligned} d &= 4.6 \text{ in} & h &= 6 \text{ in} \\ \text{Surface Area} &= 119.95 \text{ in}^2 \\ \text{Volume} &= 99.71 \text{ in}^3 \end{aligned}$$

3.



$$\begin{aligned} r &= 6.6 \text{ yd} & h &= 8.8 \text{ yd} \\ \text{Surface Area} &= 638.62 \text{ yd}^2 \\ \text{Volume} &= 1204.26 \text{ yd}^3 \end{aligned}$$

4.



$$\begin{aligned} d &= 10 \text{ cm} & h &= 12 \text{ cm} \\ \text{Surface Area} &= 534.07 \text{ cm}^2 \\ \text{Volume} &= 942.48 \text{ cm}^3 \end{aligned}$$