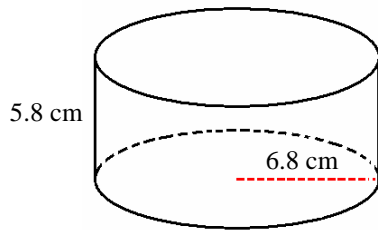


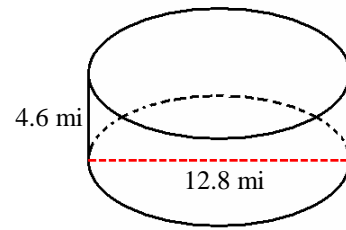
Volume and Surface Area of Cylinders (A)

Instructions: Find the volume and surface area for each cylinder.

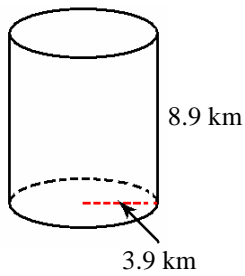
1)



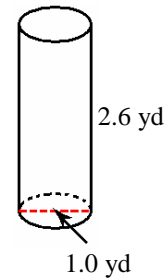
2)



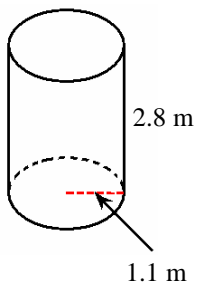
3)



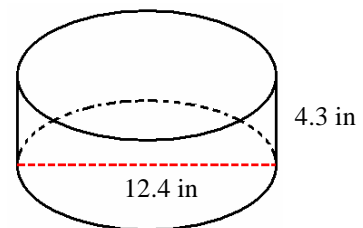
4)



5)



6)

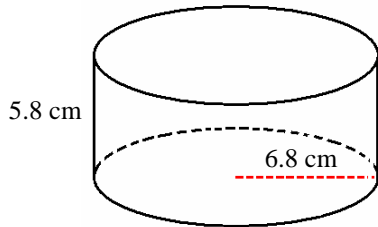


Volume and Surface Area of Cylinders Answer (A)

Instructions: Find the volume and surface area for each cylinder.

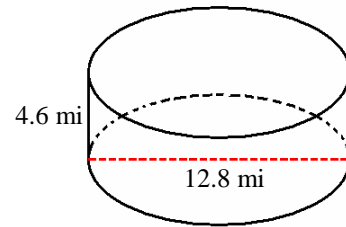
Formula: Volume (V) = $\pi r^2 h$, Surface Area (A) = $2\pi r(r+h)$, $\pi = 3.14$

1)



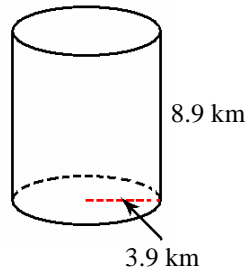
$$V = 3.14 \times 6.8 \times 6.8 \times 5.8 = 842.1 \text{ cm}^3$$
$$A = (2 \times 3.14 \times 6.8) \times (6.8 + 5.8) = 538.1 \text{ cm}^2$$

2)



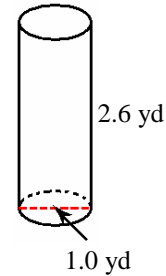
$$V = 3.14 \times 6.4 \times 6.4 \times 4.6 = 591.6 \text{ mi}^3$$
$$A = (2 \times 3.14 \times 6.4) \times (6.4 + 4.6) = 442.1 \text{ mi}^2$$

3)



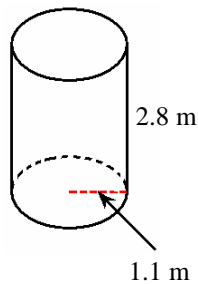
$$V = 3.14 \times 3.9 \times 3.9 \times 8.9 = 425.1 \text{ km}^3$$
$$A = (2 \times 3.14 \times 3.9) \times (3.9 + 8.9) = 313.5 \text{ km}^2$$

4)



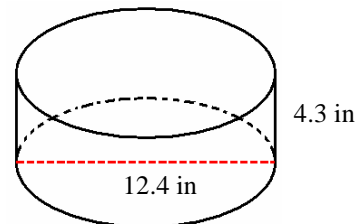
$$V = 3.14 \times 0.5 \times 0.5 \times 2.6 = 2.0 \text{ yd}^3$$
$$A = (2 \times 3.14 \times 0.5) \times (0.5 + 2.6) = 9.7 \text{ yd}^2$$

5)



$$V = 3.14 \times 1.1 \times 1.1 \times 2.8 = 10.6 \text{ m}^3$$
$$A = (2 \times 3.14 \times 1.1) \times (1.1 + 2.8) = 26.9 \text{ m}^2$$

6)

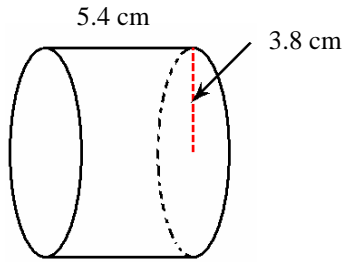


$$V = 3.14 \times 6.2 \times 6.2 \times 4.3 = 519.0 \text{ in}^3$$
$$A = (2 \times 3.14 \times 6.2) \times (6.2 + 4.3) = 408.8 \text{ in}^2$$

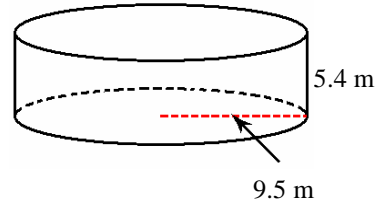
Volume and Surface Area of Cylinders (B)

Instructions: Find the volume and surface area for each cylinder.

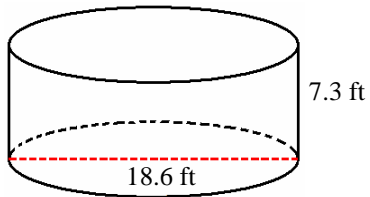
1)



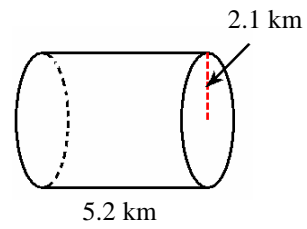
2)



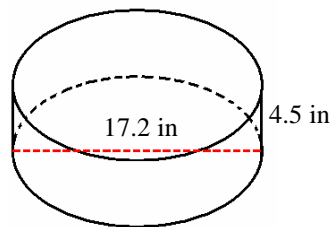
3)



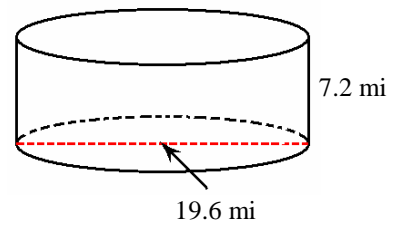
4)



5)



6)

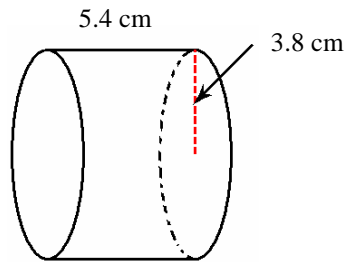


Volume and Surface Area of Cylinders Answer (B)

Instructions: Find the volume and surface area for each cylinder.

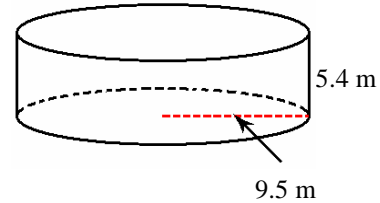
Formula: Volume (V) = $\pi r^2 h$, Surface Area (A) = $2\pi r(r+h)$, $\pi = 3.14$

1)



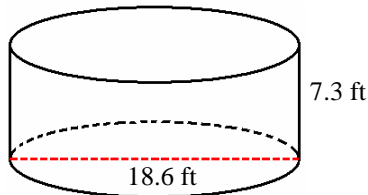
$$V = 3.14 \times 3.8 \times 3.8 \times 5.4 = 244.8 \text{ cm}^3$$
$$A = (2 \times 3.14 \times 3.8) \times (3.8 + 5.4) = 219.5 \text{ cm}^2$$

2)



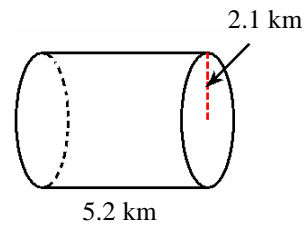
$$V = 3.14 \times 9.5 \times 9.5 \times 5.4 = 1530.3 \text{ m}^3$$
$$A = (2 \times 3.14 \times 9.5) \times (9.5 + 5.4) = 888.9 \text{ m}^2$$

3)



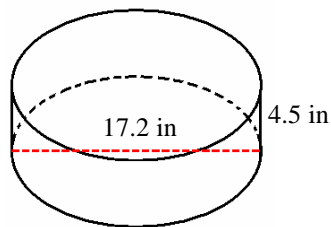
$$V = 3.14 \times 9.3 \times 9.3 \times 7.3 = 1982.5 \text{ ft}^3$$
$$A = (2 \times 3.14 \times 9.3) \times (9.3 + 7.3) = 969.5 \text{ ft}^2$$

4)



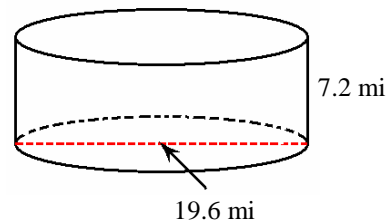
$$V = 3.14 \times 2.1 \times 2.1 \times 5.2 = 72.0 \text{ km}^3$$
$$A = (2 \times 3.14 \times 2.1) \times (2.1 + 5.2) = 96.3 \text{ km}^2$$

5)



$$V = 3.14 \times 8.6 \times 8.6 \times 4.5 = 1045.1 \text{ in}^3$$
$$A = (2 \times 3.14 \times 8.6) \times (8.6 + 4.5) = 707.5 \text{ in}^2$$

6)

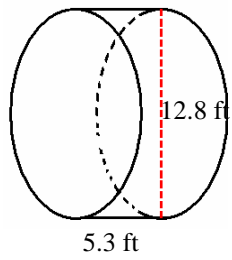


$$V = 3.14 \times 9.8 \times 9.8 \times 7.2 = 2171.3 \text{ mi}^3$$
$$A = (2 \times 3.14 \times 9.8) \times (9.8 + 7.2) = 1046.2 \text{ mi}^2$$

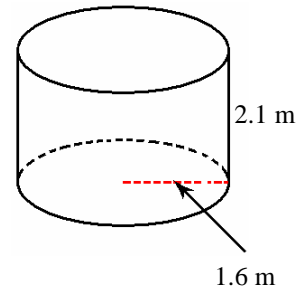
Volume and Surface Area of Cylinders (C)

Instructions: Find the volume and surface area for cylinder.

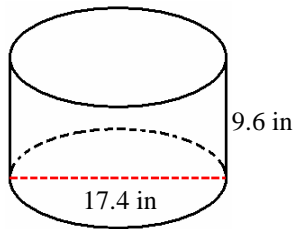
1)



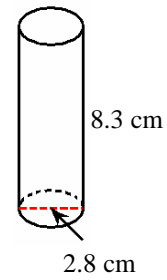
2)



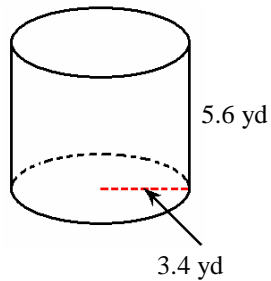
3)



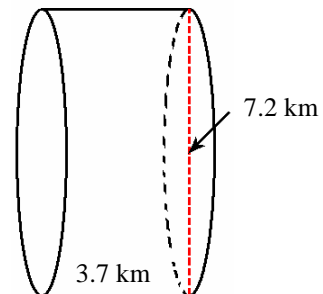
4)



5)



6)

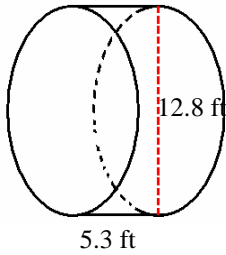


Volume and Surface Area of Cylinders Answer (C)

Instructions: Find the volume and surface area for each cylinder.

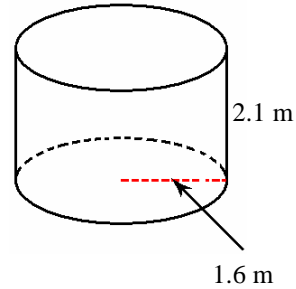
Formula: Volume (V) = $\pi r^2 h$, Surface Area (A) = $2\pi r(r+h)$, $\pi = 3.14$

1)



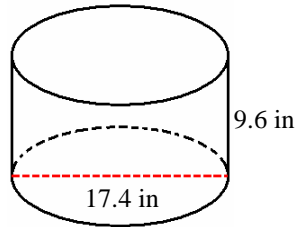
$$V = 3.14 \times 5.3 \times 5.3 \times 12.8 = 681.7 \text{ ft}^3$$
$$A = (2 \times 3.14 \times 5.3) \times (5.3 + 12.8) = 470.2 \text{ ft}^2$$

2)



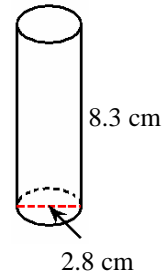
$$V = 3.14 \times 1.6 \times 1.6 \times 2.1 = 16.9 \text{ m}^3$$
$$A = (2 \times 3.14 \times 1.6) \times (1.6 + 2.1) = 37.2 \text{ m}^2$$

3)



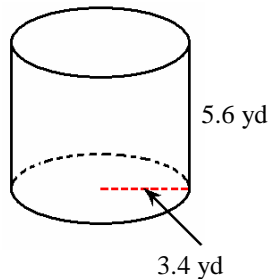
$$V = 3.14 \times 17.4 \times 17.4 \times 9.6 = 2281.6 \text{ in}^3$$
$$A = (2 \times 3.14 \times 17.4) \times (17.4 + 9.6) = 999.8 \text{ in}^2$$

4)



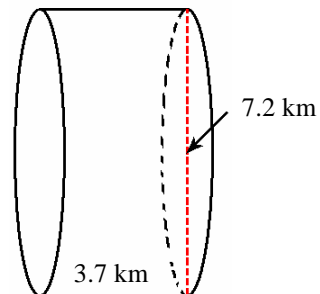
$$V = 3.14 \times 2.8 \times 2.8 \times 8.3 = 51.1 \text{ cm}^3$$
$$A = (2 \times 3.14 \times 2.8) \times (2.8 + 8.3) = 85.3 \text{ cm}^2$$

5)



$$V = 3.14 \times 3.4 \times 3.4 \times 5.6 = 203.3 \text{ yd}^3$$
$$A = (2 \times 3.14 \times 3.4) \times (3.4 + 5.6) = 192.2 \text{ yd}^2$$

6)

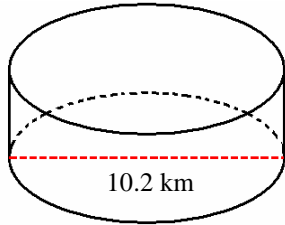


$$V = 3.14 \times 3.7 \times 3.7 \times 7.2 = 150.6 \text{ km}^3$$
$$A = (2 \times 3.14 \times 3.7) \times (3.7 + 7.2) = 165.0 \text{ km}^2$$

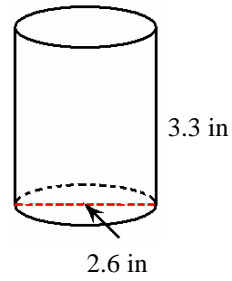
Volume and Surface Area of Cylinders (D)

Instructions: Find the volume and surface area for each cylinder.

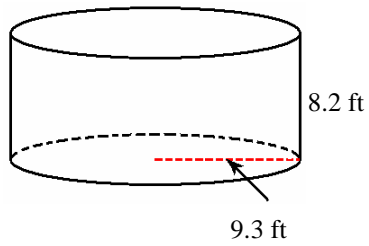
1)



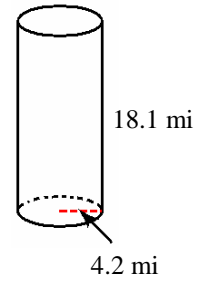
2)



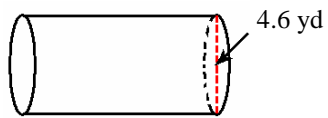
3)



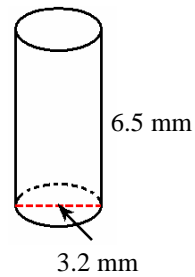
4)



5)



6)

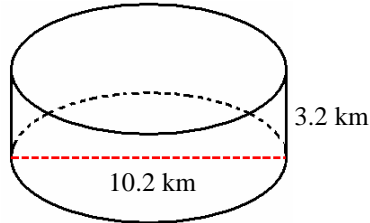


Volume and Surface Area of Cylinders Answer (D)

Instructions: Find the volume and surface area for each cylinder.

Formula: Volume (V) = $\pi r^2 h$, Surface Area (A) = $2\pi r(r+h)$, $\pi = 3.14$

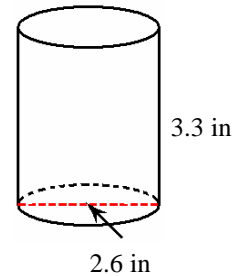
1)



$$V = 3.14 \times 5.1 \times 5.1 \times 3.2 = 261.3 \text{ km}^3$$

$$A = (2 \times 3.14 \times 5.1) \times (5.1 + 3.2) = 265.8 \text{ km}^2$$

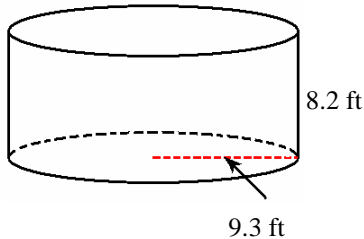
2)



$$V = 3.14 \times 1.3 \times 1.3 \times 3.3 = 17.5 \text{ in}^3$$

$$A = (2 \times 3.14 \times 1.3) \times (1.3 + 3.3) = 37.6 \text{ in}^2$$

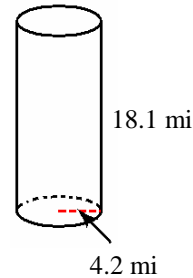
3)



$$V = 3.14 \times 9.3 \times 9.3 \times 8.2 = 2226.9 \text{ ft}^3$$

$$A = (2 \times 3.14 \times 9.3) \times (9.3 + 8.2) = 1022.1 \text{ ft}^2$$

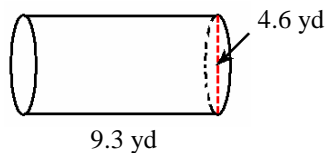
4)



$$V = 3.14 \times 4.2 \times 4.2 \times 18.1 = 1002.6 \text{ mi}^3$$

$$A = (2 \times 3.14 \times 4.2) \times (4.2 + 18.1) = 588.2 \text{ mi}^2$$

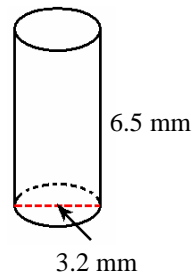
5)



$$V = 3.14 \times 2.3 \times 2.3 \times 9.3 = 154.5 \text{ yd}^3$$

$$A = (2 \times 3.14 \times 2.3) \times (2.3 + 9.3) = 167.6 \text{ yd}^2$$

6)



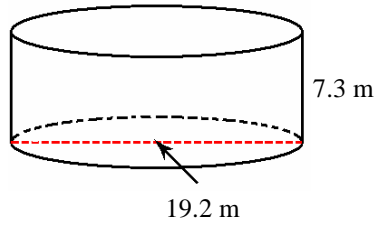
$$V = 3.14 \times 1.6 \times 1.6 \times 6.5 = 52.2 \text{ mm}^3$$

$$A = (2 \times 3.14 \times 1.6) \times (1.6 + 6.5) = 81.4 \text{ mm}^2$$

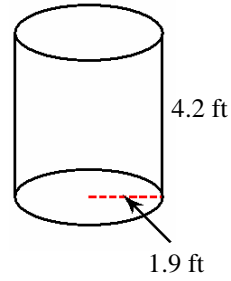
Volume and Surface Area of Cylinders (E)

Instructions: Find the volume and surface area for each cylinder.

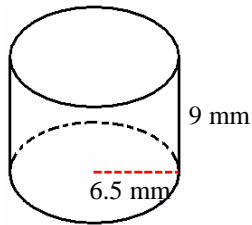
1)



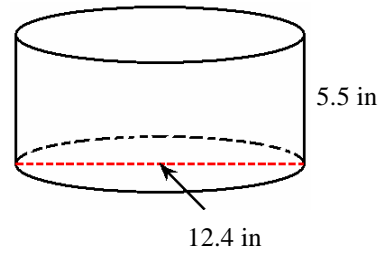
2)



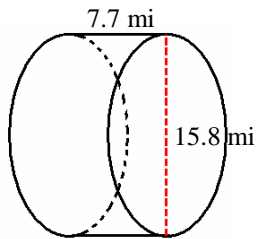
3)



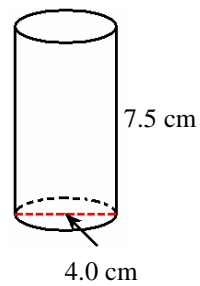
4)



5)



6)

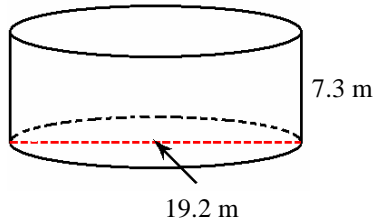


Volume and Surface Area of Cylinders Answer (E)

Instructions: Find the volume and surface area for each cylinder.

Formula: Volume (V) = $\pi r^2 h$, Surface Area (A) = $2\pi r(r+h)$, $\pi = 3.14$

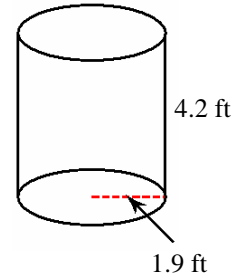
1)



$$V = 3.14 \times 19.2 \times 19.2 \times 7.3 = 2112.5 \text{ m}^3$$

$$A = (2 \times 3.14 \times 19.2) \times (19.2 + 7.3) = 1018.9 \text{ m}^2$$

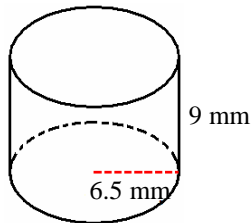
2)



$$V = 3.14 \times 1.9 \times 1.9 \times 4.2 = 47.6 \text{ ft}^3$$

$$A = (2 \times 3.14 \times 1.9) \times (1.9 + 4.2) = 72.8 \text{ ft}^2$$

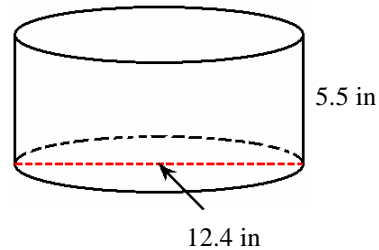
3)



$$V = 3.14 \times 6.5 \times 6.5 \times 9.0 = 1194.0 \text{ mm}^3$$

$$A = (2 \times 3.14 \times 6.5) \times (6.5 + 9.0) = 632.7 \text{ mm}^2$$

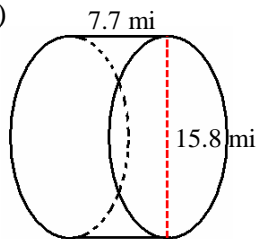
4)



$$V = 3.14 \times 12.4 \times 12.4 \times 5.5 = 663.9 \text{ in}^3$$

$$A = (2 \times 3.14 \times 12.4) \times (12.4 + 5.5) = 455.6 \text{ in}^2$$

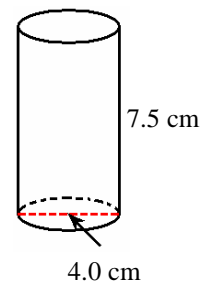
5)



$$V = 3.14 \times 7.7 \times 7.7 \times 15.8 = 1508.9 \text{ mi}^3$$

$$A = (2 \times 3.14 \times 7.7) \times (7.7 + 15.8) = 773.9 \text{ mi}^2$$

6)



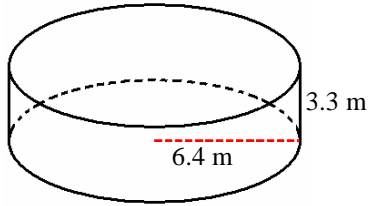
$$V = 3.14 \times 2.0 \times 2.0 \times 7.5 = 94.2 \text{ cm}^3$$

$$A = (2 \times 3.14 \times 2.0) \times (2.0 + 7.5) = 119.3 \text{ cm}^2$$

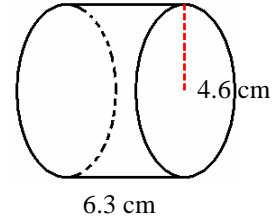
Volume and Surface Area of Cylinders (F)

Instructions: Find the volume and surface area for each Cylinders.

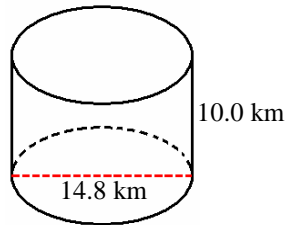
1)



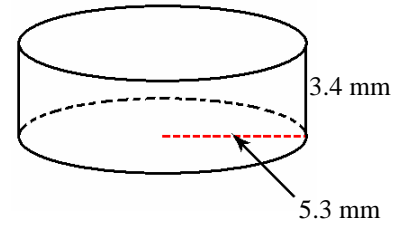
2)



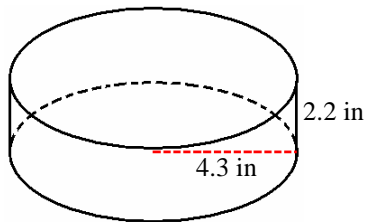
3)



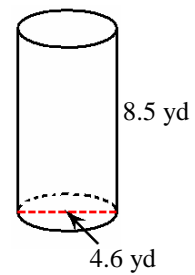
4)



5)



6)

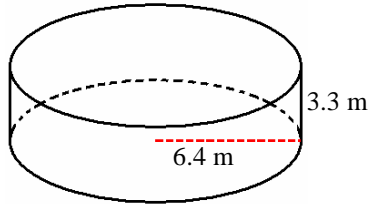


Volume and Surface Area of Cylinders Answer (F)

Instructions: Find the volume and surface area for each Cylinders.

Formula: Volume (V) = $\pi r^2 h$, Surface Area (A) = $2\pi r(r+h)$, $\pi = 3.14$

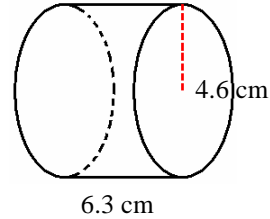
1)



$$V = 3.14 \times 6.4 \times 6.4 \times 3.3 = 424.4 \text{ m}^3$$

$$A = (2 \times 3.14 \times 6.4) \times (6.4 + 3.3) = 389.9 \text{ m}^2$$

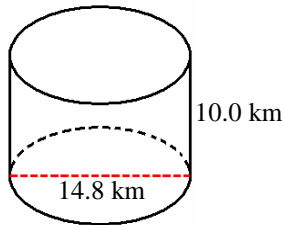
2)



$$V = 3.14 \times 4.6 \times 4.6 \times 6.3 = 418.6 \text{ cm}^3$$

$$A = (2 \times 3.14 \times 4.6) \times (4.6 + 6.3) = 314.9 \text{ cm}^2$$

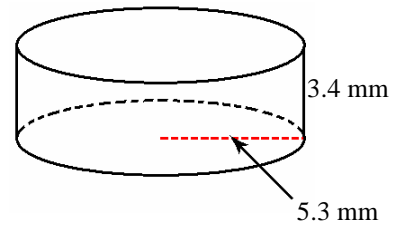
3)



$$V = 3.14 \times 7.4 \times 7.4 \times 10.0 = 1719.5 \text{ km}^3$$

$$A = (2 \times 3.14 \times 7.4) \times (7.4 + 10.0) = 808.6 \text{ km}^2$$

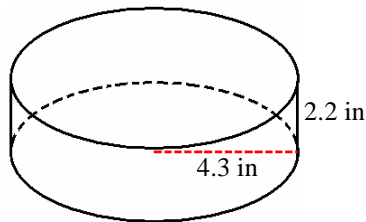
4)



$$V = 3.14 \times 5.3 \times 5.3 \times 3.4 = 299.9 \text{ mm}^3$$

$$A = (2 \times 3.14 \times 5.3) \times (5.3 + 3.4) = 289.6 \text{ mm}^2$$

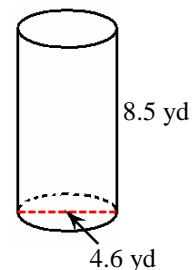
5)



$$V = 3.14 \times 4.3 \times 4.3 \times 2.2 = 127.7 \text{ in}^3$$

$$A = (2 \times 3.14 \times 4.3) \times (4.3 + 2.2) = 175.5 \text{ in}^2$$

6)



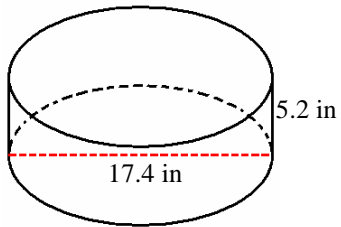
$$V = 3.14 \times 2.3 \times 2.3 \times 8.5 = 141.2 \text{ yd}^3$$

$$A = (2 \times 3.14 \times 2.3) \times (2.3 + 8.5) = 156.0 \text{ yd}^2$$

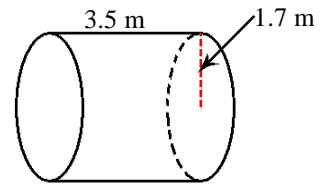
Volume and Surface Area of Cylinders (G)

Instructions: Find the volume and surface area for each Cylinders.

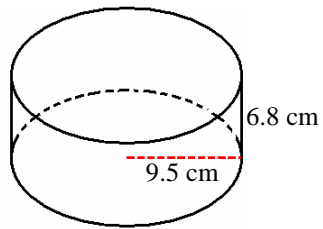
1)



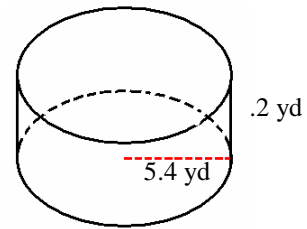
2)



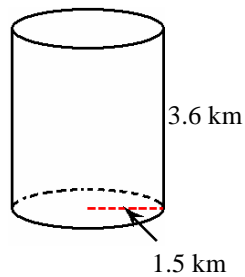
3)



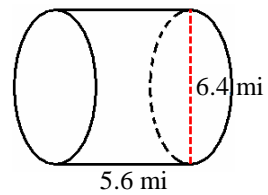
4)



5)



6)

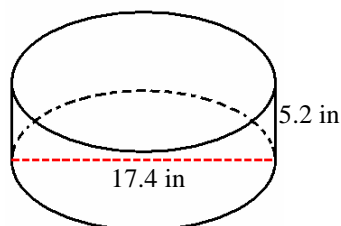


Volume and Surface Area of Cylinders Answer (G)

Instructions: Find the volume and surface area for each Cylinders.

Formula: Volume (V) = $\pi r^2 h$, Surface Area (A) = $2\pi r(r+h)$, $\pi = 3.14$

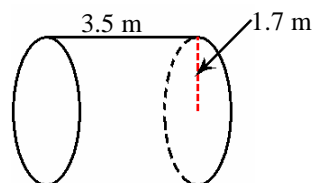
1)



$$V = 3.14 \times 8.7 \times 8.7 \times 5.2 = 1235.9 \text{ in}^3$$

$$A = (2 \times 3.14 \times 8.7) \times (8.7 + 5.2) = 759.4 \text{ in}^2$$

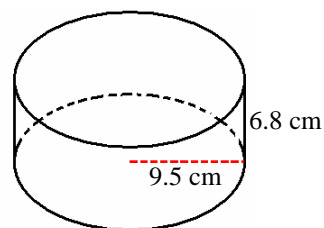
2)



$$V = 3.14 \times 1.7 \times 1.7 \times 3.5 = 31.8 \text{ m}^3$$

$$A = (2 \times 3.14 \times 1.7) \times (1.7 + 3.5) = 55.5 \text{ m}^2$$

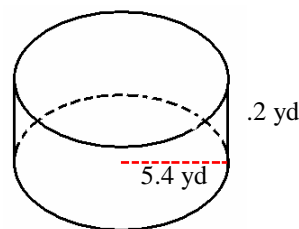
3)



$$V = 3.14 \times 9.5 \times 9.5 \times 6.8 = 1927.0 \text{ cm}^3$$

$$A = (2 \times 3.14 \times 9.5) \times (9.5 + 6.8) = 972.5 \text{ cm}^2$$

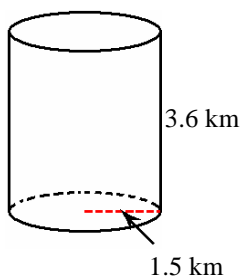
4)



$$V = 3.14 \times 5.4 \times 5.4 \times 4.2 = 384.6 \text{ yd}^3$$

$$A = (2 \times 3.14 \times 5.4) \times (5.4 + 4.2) = 325.6 \text{ yd}^2$$

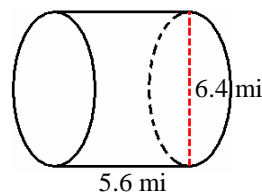
5)



$$V = 3.14 \times 1.5 \times 1.5 \times 3.6 = 25.4 \text{ km}^3$$

$$A = (2 \times 3.14 \times 1.5) \times (1.5 + 3.6) = 48.0 \text{ km}^2$$

6)



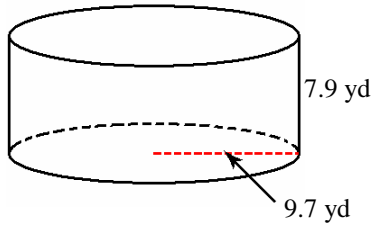
$$V = 3.14 \times 3.2 \times 3.2 \times 5.6 = 180.1 \text{ mi}^3$$

$$A = (2 \times 3.14 \times 3.2) \times (3.2 + 5.6) = 176.8 \text{ mi}^2$$

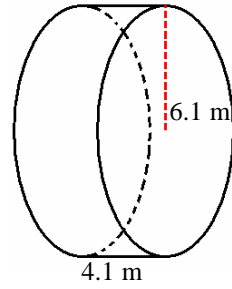
Volume and Surface Area of Cylinders (H)

Instructions: Find the volume and surface area for each Cylinders.

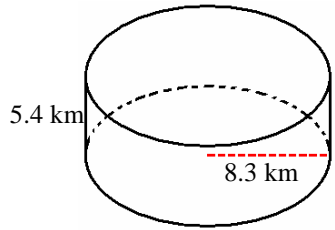
1)



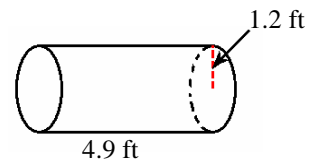
2)



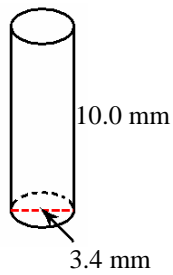
3)



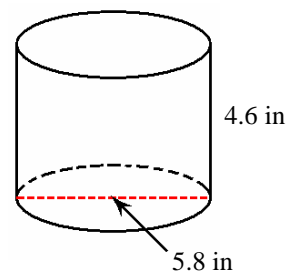
4)



5)



6)

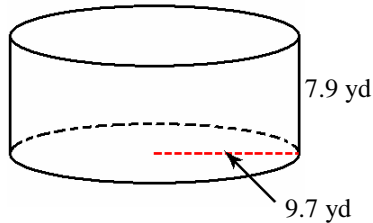


Volume and Surface Area of Cylinders Answer (H)

Instructions: Find the volume and surface area for each Cylinders.

Formula: Volume (V) = $\pi r^2 h$, Surface Area (A) = $2\pi r(r+h)$, $\pi = 3.14$

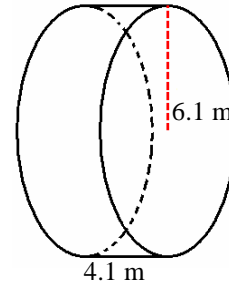
1)



$$V = 3.14 \times 9.7 \times 9.7 \times 7.9 = 2334.0 \text{ yd}^3$$

$$A = (2 \times 3.14 \times 9.7) \times (9.7 + 7.9) = 1072.1 \text{ yd}^2$$

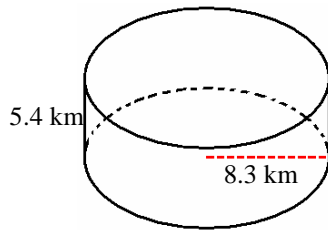
2)



$$V = 3.14 \times 4.1 \times 4.1 \times 6.1 = 479.0 \text{ m}^3$$

$$A = (2 \times 3.14 \times 4.1) \times (4.1 + 6.1) = 390.7 \text{ m}^2$$

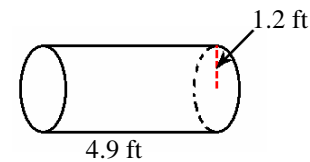
3)



$$V = 3.14 \times 8.3 \times 8.3 \times 5.4 = 1168.1 \text{ km}^3$$

$$A = (2 \times 3.14 \times 8.3) \times (8.3 + 5.4) = 714.1 \text{ km}^2$$

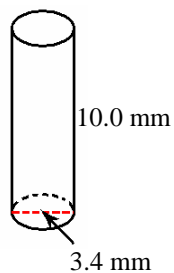
4)



$$V = 3.14 \times 4.9 \times 4.9 \times 1.2 = 22.2 \text{ ft}^3$$

$$A = (2 \times 3.14 \times 4.9) \times (4.9 + 1.2) = 46.0 \text{ ft}^2$$

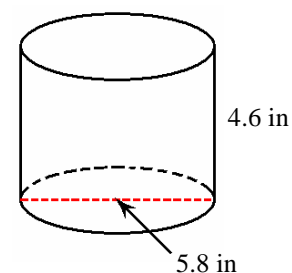
5)



$$V = 3.14 \times 3.4 \times 3.4 \times 10.0 = 90.7 \text{ mm}^3$$

$$A = (2 \times 3.14 \times 3.4) \times (3.4 + 10.0) = 124.9 \text{ mm}^2$$

6)



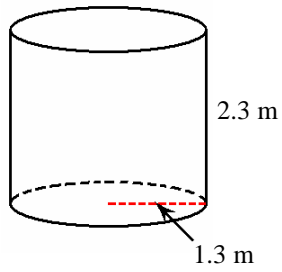
$$V = 3.14 \times 5.8 \times 5.8 \times 4.6 = 121.5 \text{ in}^3$$

$$A = (2 \times 3.14 \times 5.8) \times (5.8 + 4.6) = 136.6 \text{ in}^2$$

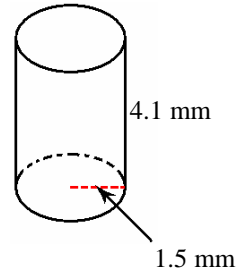
Volume and Surface Area of Cylinders (I)

Instructions: Find the volume and surface area for each Cylinders.

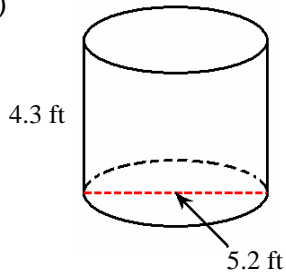
1)



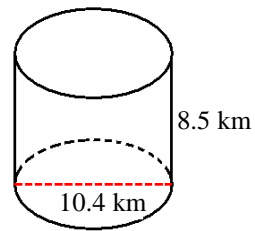
2)



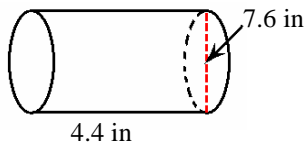
3)



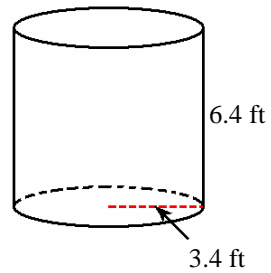
4)



5)



6)

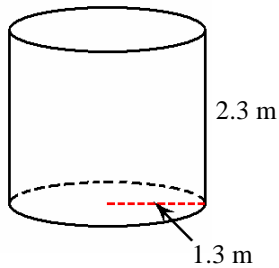


Volume and Surface Area of Cylinders Answer (I)

Instructions: Find the volume and surface area for each Cylinders.

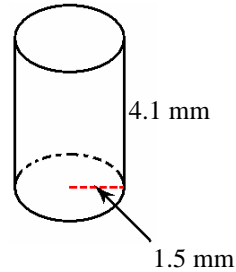
Formula: Volume (V) = $\pi r^2 h$, Surface Area (A) = $2\pi r(r+h)$, $\pi = 3.14$

1)



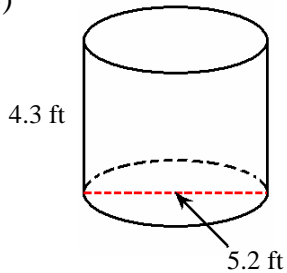
$$V = 3.14 \times 1.3 \times 1.3 \times 2.3 = 12.2 \text{ m}^3$$
$$A = (2 \times 3.14 \times 1.3) \times (1.3 + 2.3) = 29.4 \text{ m}^2$$

2)



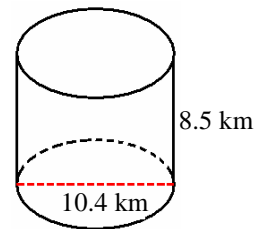
$$V = 3.14 \times 1.5 \times 1.5 \times 4.1 = 29.0 \text{ mm}^3$$
$$A = (2 \times 3.14 \times 1.5) \times (1.5 + 4.1) = 52.8 \text{ mm}^2$$

3)



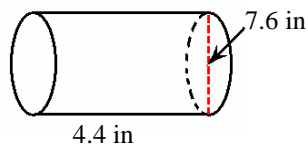
$$V = 3.14 \times 5.2 \times 5.2 \times 4.3 = 91.3 \text{ ft}^3$$
$$A = (2 \times 3.14 \times 5.2) \times (5.2 + 4.3) = 112.7 \text{ ft}^2$$

4)



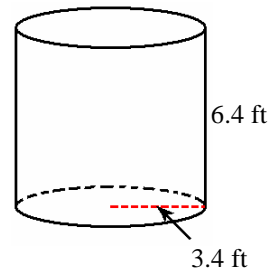
$$V = 3.14 \times 10.4 \times 10.4 \times 8.5 = 721.7 \text{ km}^3$$
$$A = (2 \times 3.14 \times 10.4) \times (10.4 + 8.5) = 447.4 \text{ km}^2$$

5)



$$V = 3.14 \times 7.6 \times 7.6 \times 4.4 = 199.5 \text{ in}^3$$
$$A = (2 \times 3.14 \times 7.6) \times (7.6 + 4.4) = 195.7 \text{ in}^2$$

6)

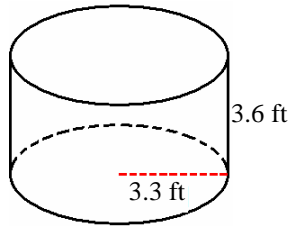


$$V = 3.14 \times 3.4 \times 3.4 \times 6.4 = 232.3 \text{ ft}^3$$
$$A = (2 \times 3.14 \times 3.4) \times (3.4 + 6.4) = 209.2 \text{ ft}^2$$

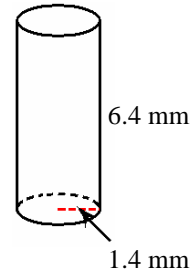
Volume and Surface Area of Cylinders (J)

Instructions: Find the volume and surface area for each Cylinders.

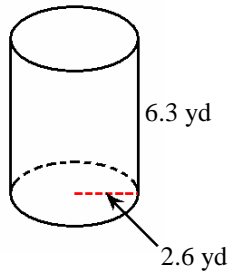
1)



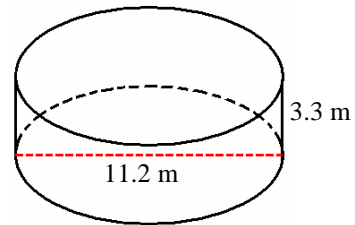
2)



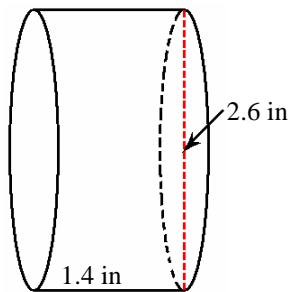
3)



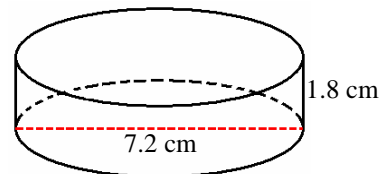
4)



5)



6)

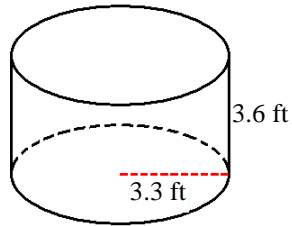


Volume and Surface Area of Cylinders Answer (J)

Instructions: Find the volume and surface area for each Cylinders.

Formula: Volume (V) = $\pi r^2 h$, Surface Area (A) = $2\pi r(r+h)$, $\pi = 3.14$

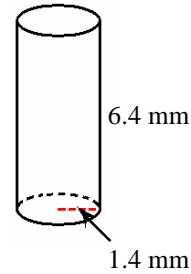
1)



$$V = 3.14 \times 3.3 \times 3.3 \times 3.6 = 123.1 \text{ ft}^3$$

$$A = (2 \times 3.14 \times 3.3) \times (3.3 + 3.6) = 143.0 \text{ ft}^2$$

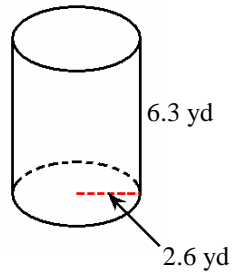
2)



$$V = 3.14 \times 1.4 \times 1.4 \times 6.4 = 39.4 \text{ mm}^3$$

$$A = (2 \times 3.14 \times 1.4) \times (1.4 + 6.4) = 68.6 \text{ mm}^2$$

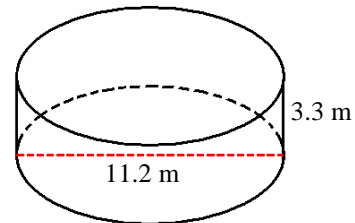
3)



$$V = 3.14 \times 2.6 \times 2.6 \times 6.3 = 133.7 \text{ yd}^3$$

$$A = (2 \times 3.14 \times 2.6) \times (2.6 + 6.3) = 145.3 \text{ yd}^2$$

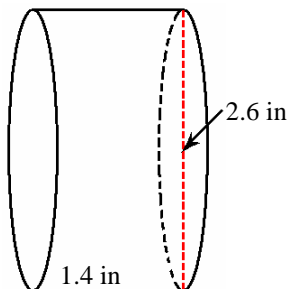
4)



$$V = 3.14 \times 5.6 \times 5.6 \times 3.3 = 325.0 \text{ m}^3$$

$$A = (2 \times 3.14 \times 5.6) \times (5.6 + 3.3) = 313.0 \text{ m}^2$$

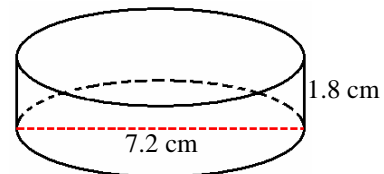
5)



$$V = 3.14 \times 1.3 \times 1.3 \times 1.4 = 7.4 \text{ in}^3$$

$$A = (2 \times 3.14 \times 1.3) \times (1.3 + 1.4) = 22.0 \text{ in}^2$$

6)



$$V = 3.14 \times 3.6 \times 3.6 \times 1.8 = 73.2 \text{ cm}^3$$

$$A = (2 \times 3.14 \times 3.6) \times (3.6 + 1.8) = 122.1 \text{ cm}^2$$