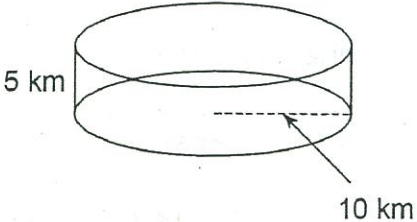
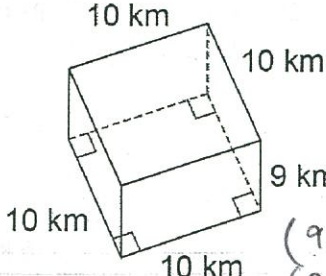


Surface Area Review

Remember to show ALL of your work and round to the tenths place when necessary!

<p>9.</p>  <p>5 km</p> <p>10 km</p> $\pi(10)^2 \cdot 2 = 628$ $\pi(20) \cdot 5 = 314$ $628 + 314 = 942 \text{ km}^2$	<p>10.</p>  <p>10 km</p> <p>10 km</p> <p>10 km</p> <p>9 km</p> $(9 \cdot 10 \cdot 2) = 180$ $(9 \cdot 10 \cdot 2) = 180$ $(10 \cdot 10 \cdot 2) = 200$ $180 + 180 + 200 = 560 \text{ km}^2$	<p>Answers</p> <p>9. <u>942 km²</u></p> <p>10. <u>560 km²</u></p>
<p>11. Mr. Jones made a cylindrical pencil holder. It has a height of 8 in and a diameter of 4 in. How much material does he need to make his pencil holder?</p> <p>area of the middle</p> $\pi(4) \cdot 8 = 100.5$ <p>+</p> <p>area of only one circle</p> $\pi(2)^2 = 12.6$ $100.5 + 12.6 = 113.1 \text{ in}^2$	<p>12. You are painting a room that is 12 ft long, 16 ft wide and 9 ft high. Find the area of the four walls that you are going to paint.</p> $(9 \cdot 16 \cdot 2) +$ $(9 \cdot 12 \cdot 2) = 504 \text{ ft}^2$	<p>Answers</p> <p>11. <u>113.1 in²</u></p> <p>12. <u>504 ft²</u></p>
<p>13. You need to wrap a package that is shaped like rectangular prism. The dimensions are 10 inches long by 5 inches wide by 3 inches high. How much paper do you need to wrap the package?</p> $(10 \cdot 5 \cdot 2) = 100$ <p>+</p> $(10 \cdot 3 \cdot 2) = 60$ <p>+</p> $(5 \cdot 3 \cdot 2) = 30$ $100 + 60 + 30 = 190 \text{ in}^2$	<p>14. Bob's Soup Company made 500 cans of Chunky Chicken Soup. If each can is 4 inches high and has a diameter of 3 inches, how much paper do they need to use to make labels for the cans?</p> $\pi(3) \cdot 4 = 37.7$ $37.7 \cdot 500 = 18,850 \text{ in}^2$	<p>Answers</p> <p>13. <u>190 in²</u></p> <p>14. <u>18,850 in²</u></p>
<p>15. A rectangular sofa cushion is 36 inches by 30 inches by 20 inches. How many cushions can be covered with 38,400 square inches of material?</p> $(36 \cdot 30 \cdot 2) = 2160$ <p>+</p> $(36 \cdot 20 \cdot 2) = 1440$ <p>+</p> $(30 \cdot 20 \cdot 2) = 1200$ $2160 + 1440 + 1200 = 4800$ $38400 \div 4800 = 8 \text{ cushions}$	<p>16. Louise is covering a rectangular shaped pillow with new fabric. If the fabric costs \$0.12 per square inch, how much money will Louise spend on the fabric? (The pillow's dimensions are 8 in. by 6 in. by 4 in.)</p> $(8 \cdot 6 \cdot 2) = 96$ <p>+</p> $(8 \cdot 4 \cdot 2) = 64$ <p>+</p> $(6 \cdot 4 \cdot 2) = 48$ $96 + 64 + 48 = 208$ $208 \cdot 0.12 = \$24.96$	<p>Answers</p> <p>15. <u>8 cushions</u></p> <p>16. <u>\$24.96</u></p>