Cylinder Volume Questions

Pictured below are two cylindrical cans of paint. Answer the questions.

1. What is formula for finding the area of a circle?  
   1. ____________________________

2. What is the formula for finding the volume of a cylinder?  
   2. ____________________________

3. What is the value of pi, rounded to the nearest hundredth?  
   3. ____________________________

4. What is the radius of the base of Can A?  
   4. ____________________________

5. What is the radius of the base of Can B?  
   5. ____________________________

6. What is the area of Can A’s base?  
   6. ____________________________

   (Show your work on the back of this page. Include units in your answer.)

7. What is the area of Can B’s base?  
   7. ____________________________

   (Show your work on the back of this page. Include units in your answer.)

8. Which base has a greater area: Can A or Can B?  
   8. ____________________________

9. What is the height of Can A?  
   9. ____________________________

10. What is the height of Can B?  
    10. ____________________________

11. Which has a greater height: Can A or Can B?  
    11. ____________________________

12. What is the volume of Can A?  
    12. ____________________________

   (Show your work on the back of this page. Include units in your answer.)

13. What is the volume of Can B?  
    13. ____________________________

   (Show your work on the back of this page. Include units in your answer.)

14. Which holds more paint: Can A or Can B?  
    14. ____________________________
Pictured below are two cylindrical cans of paint. Answer the questions.

Can A

1. What is the formula for finding the area of a circle? \( A = \pi r^2 \)

2. What is the formula for finding the volume of a cylinder? \( V = \pi r^2 h \)

3. What is the value of pi, rounded to the nearest hundredth? 3.14

4. What is the radius of the base of Can A? 10 cm

5. What is the radius of the base of Can B? 18 cm

6. What is the area of Can A’s base? \( 314 \text{ cm}^2 \)

7. What is the area of Can B’s base? \( 1,017.36 \text{ cm}^2 \)

8. Which base has a greater area: Can A or Can B? Can B

9. What is the height of Can A? 28 cm

10. What is the height of Can B? 9 cm

11. Which has a greater height: Can A or Can B? Can A

12. What is the volume of Can A? \( 8,792 \text{ cm}^3 \)

13. What is the volume of Can B? \( 9,156.24 \text{ cm}^3 \)

14. Which holds more paint: Can A or Can B? Can B

Preview

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