Geometry Test Review

1. Which pair of angles are NOT supplementary?

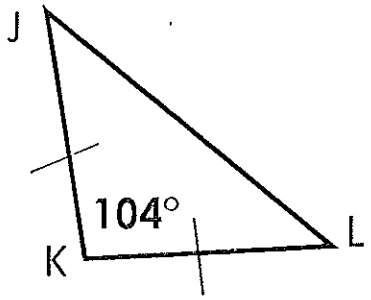
A $m\angle B = 15°$ and $m\angle C = 165°$

B $m\angle B = 60°$ and $m\angle C = 30°$

C $m\angle B = 35°$ and $m\angle C = 145°$

D $m\angle B = 105°$ and $m\angle C = 75°$

2. Find the measure of $\angle KJL$.



A 38°

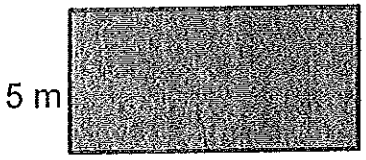
B 128°

C 14°

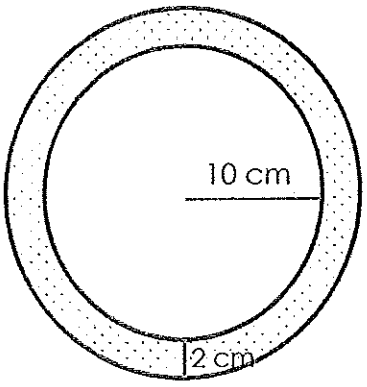
D 76°

3. The area of a square is 81 mm^2. What is the **perimeter** of the square?

4. A rectangle has a perimeter of 40 m. If it is 5 m wide, **what is its area?**



5. The drawing shows 2 circles that share a common center point.



Which expression can be used to find the approximate circumference of the outer circle in centimeters?

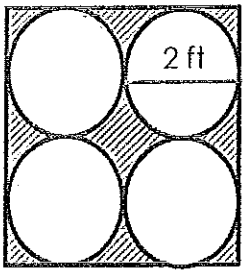
A $2\pi(10 + 2)$

B $2(10 + 2)$

C $\pi(10 + 2)$

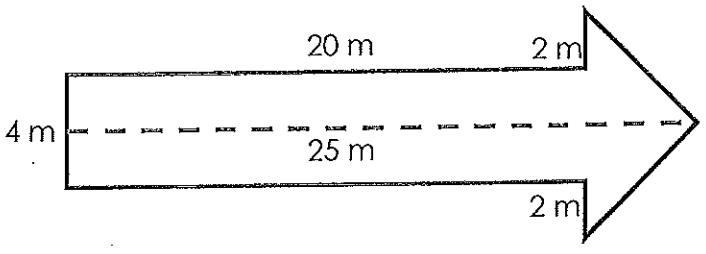
D $\frac{1}{2}(10 + 2)$

6. Find the area of the shaded region.



Area:_____

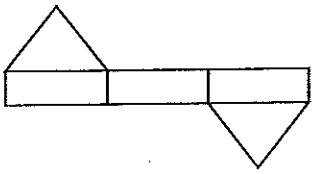
7. Find the area of the figure below.



Area:_____

8. Which solid figure can be made from the net shown?

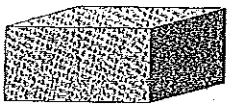
F. Triangular pyramid
G. Triangular prism
H. Rectangular prism
J. Rectangular pyramid



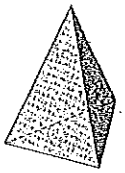
9. Which figure has 6 faces and 12 edges?

A

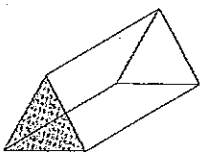
C



B

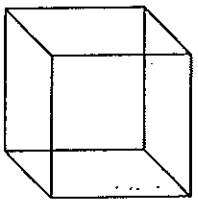


D



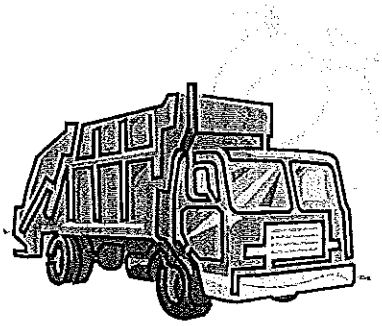
10. What is the volume of a cube with an edge of 6 centimeters?

F. 72 cm^3
G. 18 cm^3
H. 216 cm^3
J. 144 cm^3



11. How many cubic feet of mulch can be hauled in a dump truck if its bed is 7 feet deep, 4.5 feet wide, and 10 feet long.

A. 480 cu. ft.
B. 315 cu. ft.
C. 21.5 cu. ft.
D. 157 cu. ft.



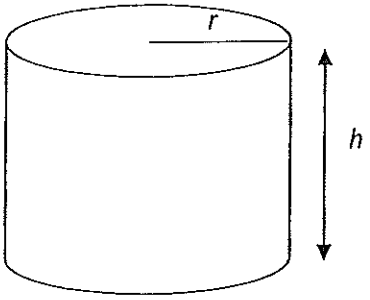
12. If the radius of the cylinder is 3 and the height is twice the radius, then which equation can be used to find the volume?

F. $v = \pi \cdot 3^2 \cdot 6$

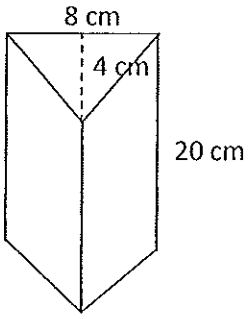
G. $v = 3 \cdot 3 \cdot 6$

H. $v = 3 \cdot 3 \cdot 3$

J. $v = \pi \cdot 3 \cdot 6$



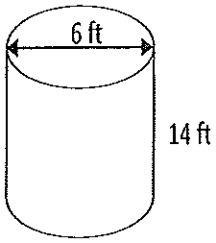
13. What is the volume of the triangular prism below?



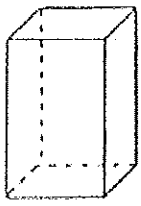
A. 32 cubic cm
B. 64 cubic cm
C. 320 cubic cm
D. 640 cubic cm

14. A water tank is 14 feet tall. Its base has a diameter of 6 feet. About how long would it take to fill the tank at a rate of 20 cubic feet of water per hour? (Use $\pi = 3.14$)

A. 5 hr
B. 10 hr
C. 15 hr
D. 20 hr

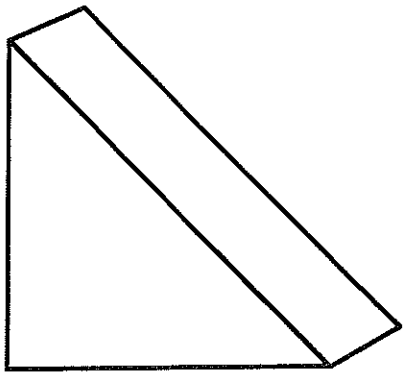


15. The volume of the solid figure below is 240 cubic inches. The area of its base is 24 square inches. What is the height of the solid?



16. Susan wants to fill a triangular prism with sand. The prism has a base that is an isosceles triangle with a base of 6 inches and a height of 4 inches. The height of the prism is 16 inches. Which equation would Susan use to find out how much sand is needed to fill the prism?

**Picture not drawn to scale.*



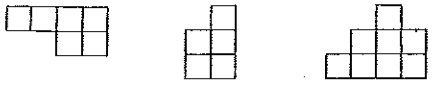
A. $A = 6 \cdot 4$

B. $A = 16 \cdot 6$

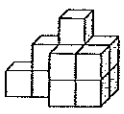
C. $V = 6 \cdot 4 \cdot 16$

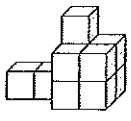
D. $V = \frac{6 \cdot 4}{2} \cdot 16$

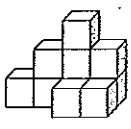
17. The top, front, and side view of a figure are given below.

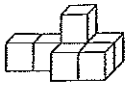


Which figure matches these views?

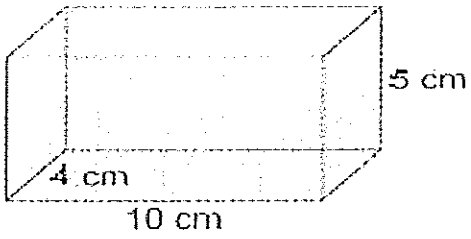
A 

B 

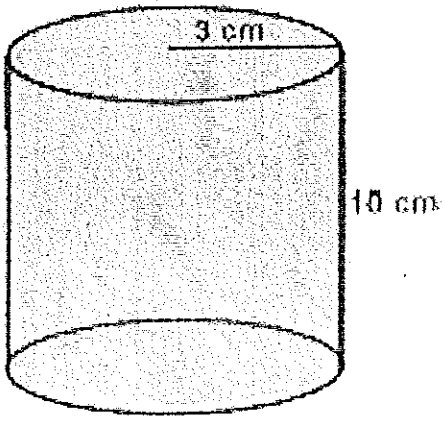
C 

D 

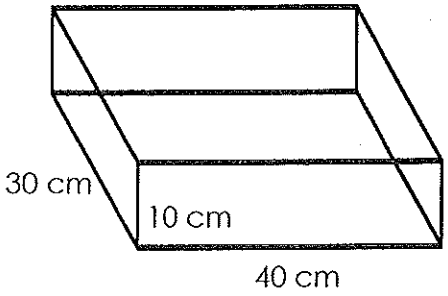
18. Find the volume of the figure below.

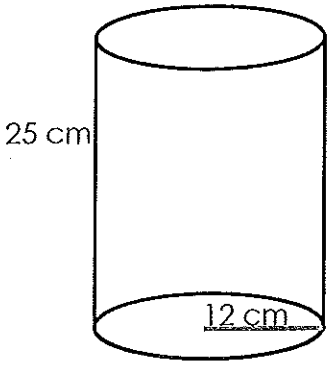


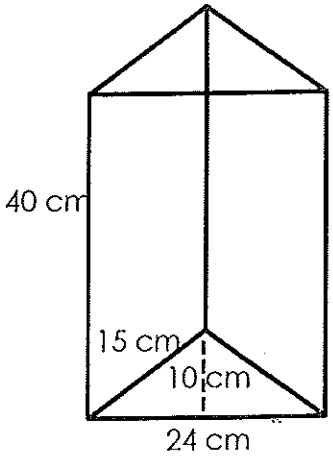
19. Haley checked a cylindrical beaker in the science lab and found that it was $\frac{1}{2}$ empty. How many cubic centimeters of fluid remains in the beaker?



20-22. James is bringing sand to school for an art project. His group is counting on him to bring in as much sand as he can. Which container should he use to bring the sand to school?







20. Volume: _____ 21. Volume: _____ 22. Volume: _____

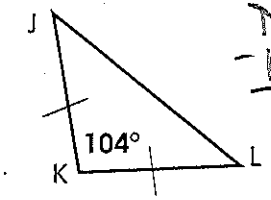
Geometry Test Review

1. Which pair of angles are NOT supplementary? $= 180°$

A $m\angle B = 15°$ and $m\angle C = 165°$ C $m\angle B = 35°$ and $m\angle C = 145°$

B $m\angle B = 60°$ and $m\angle C = 30°$ D $m\angle B = 105°$ and $m\angle C = 75°$

2. Find the measure of $\angle K$



180
-104
76

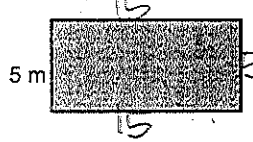
A 38° B 128°

C 14° D 76°

3. The area of a square is 81 mm². What is the perimeter of the square?

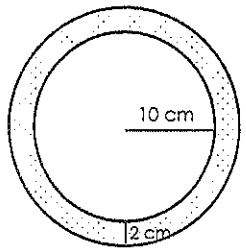
$P = 36\ mm$

4. A rectangle has a perimeter of 40 m. If it is 5 m wide, what is its area?



$A = 75 m^2$

5. The drawing shows 2 circles that share a common center point.

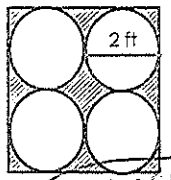


Which expression can be used to find the approximate circumference of the outer circle in centimeters?

A $2\pi(10 + 2)$ B $2(10 + 2)$

C $\pi(10 + 2)$ D $\frac{1}{2}(10 + 2)$

6. Find the area of the shaded region.



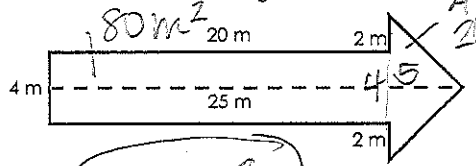
$A = \pi r^2$
$A = 3.14 \cdot 1$
$A = 3.14$

Area: $3.44 ft^2$

4
12.56

159
16.00
-12.56
3.44

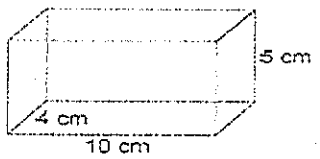
7. Find the area of the figure below.



$A = 20 m^2$

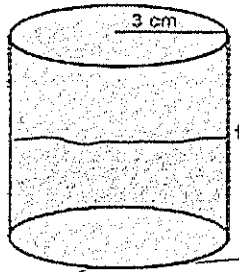
Area: $100 m^2$

18. Find the volume of the figure below.



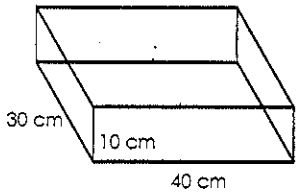
$V = 4 \cdot 10 \cdot 5$
$V = 40 \cdot 5$
$V = 200 cm^3$

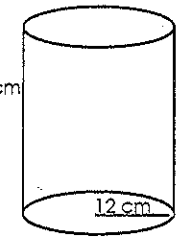
19. Haley checked a cylindrical beaker in the science lab and found that it was $\frac{1}{2}$ empty. How many cubic centimeters of fluid remains in the beaker?

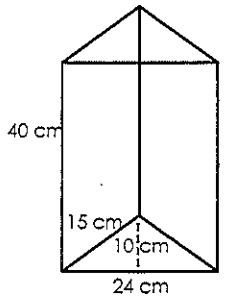


$V = \pi r^2 \cdot h$
$V = 3.14 \cdot 9 \cdot 5$
$V = 141.3 cm^3$

20-22. James is bringing sand to school for an art project. His group is counting on him to bring in as much sand as he can. Which container should he use to bring the sand to school?







*

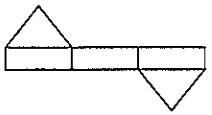
20. Volume: $12,000 cm^3$ 21. Volume: $11,304 cm^3$ 22. Volume: $4,800 cm^3$

$V = 30 \cdot 40 \cdot 10$
$V = 1200 \cdot 10$
$V = 12,000$

$V = \pi r^2 \cdot h$
$V = 3.14 \cdot 144 \cdot 25$

$V = \frac{1}{2} bh \cdot h$
$V = 12 \cdot 10 \cdot 40$
$V = 120 \cdot 40$
$V = 4800$

8. Which solid figure can be made from the net shown?



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G. Triangular prism
H. Rectangular prism
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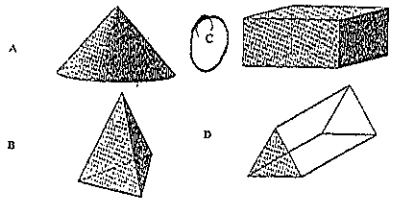
9. Which figure has 6 faces and 12 edges?



10. What is the volume of a cube with an edge of 6 centimeters?

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G. 18 cm³
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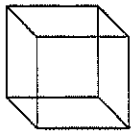


$6 \cdot 6 \cdot 6$

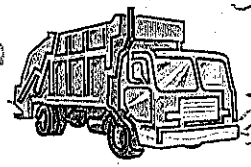
$36 \cdot 6$

216

11. How many cubic feet of mulch can be hauled in a dump truck if its bed is 7 feet deep, 4.5 feet wide, and 10 feet long.

A. 480 cu. ft.
B. 315 cu. ft.
C. 21.5 cu. ft.
D. 157 cu. ft.

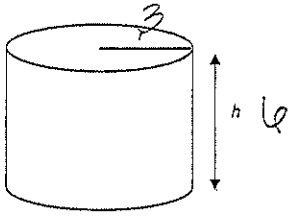
$V = 7 \cdot 4.5 \cdot 10$



$45 \cdot 7$

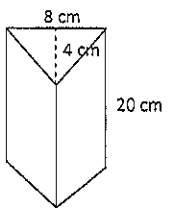
315

12. If the radius of the cylinder is 3 and the height is twice the radius, then which equation can be used to find the volume?



F. $v = \pi \cdot 3^2 \cdot 6$
G. $v = 3 \cdot 3 \cdot 6$
H. $v = 3 \cdot 3 \cdot 3$
J. $v = \pi \cdot 3 \cdot 6$

13. What is the volume of the triangular prism below?



$V = \frac{1}{2} b \cdot h \cdot h$

$V = 4 \cdot 4 \cdot 20$

$V = 16 \cdot 20$

A. 32 cubic cm
B. 44 cubic cm
C. 320 cubic cm
D. 640 cubic cm

14. A water tank is 14 feet tall. Its base has a diameter of 6 feet. About how long would it take to fill the tank at a rate of 20 cubic feet of water per hour? (Use $\pi = 3.14$)

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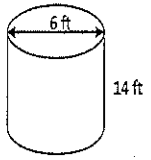

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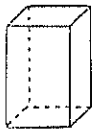


$V = Bh$

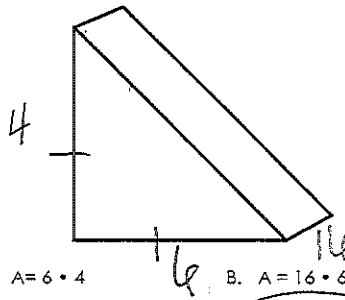
$240 = 24 \cdot h$

$\frac{240}{24} = \frac{24 \cdot h}{24}$

$10 = h$

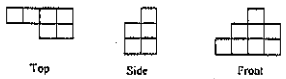
16. Susan wants to fill a triangular prism with sand. The prism has a base that is an isosceles triangle with a base of 6 inches and a height of 4 inches. The height of the prism is 16 inches. Which equation would Susan use to find out how much sand is needed to fill the prism?

*Picture not drawn to scale.



A. $A = 6 \cdot 4$
B. $A = 16 \cdot 6$
C. $V = 6 \cdot 4 \cdot 16$
D. $V = \frac{6 \cdot 4}{2} \cdot 16$

17. The top, front, and side view of a figure are given below.



Which figure matches these views?