

2. Rectangular Prism

Sketch a Picture	How many faces does your figure have?	What are the shapes of the faces?
Draw an example of a net.	Draw another example of a net.	Draw a 3 rd example of a net.

3. Triangular Prism

Sketch a Picture	How many faces does your figure have?	What are the shapes of the faces?
Draw an example of a net.	Draw another example of a net.	Draw a 3 rd example of a net.

4. Square Pyramid

Sketch a Picture	How many faces does your figure have?	What are the shapes of the faces?
Draw an example of a net.	Draw another example of a net.	Draw a 3 rd example of a net.

5. Cylinder

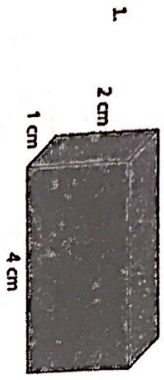
Sketch a Picture	How many faces does your figure have?	What are the shapes of the faces?
Draw an example of a net.	Draw another example of a net.	Draw a 3 rd example of a net.

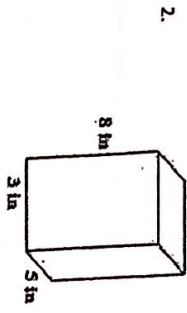
Name: _____

Date: _____ Period: _____

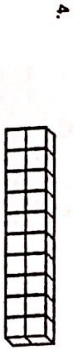
Finding Surface Area of Rectangular Prisms

Find the surface area of the following prisms. Be sure to show all steps and work to support your final answers.



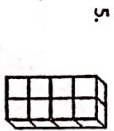


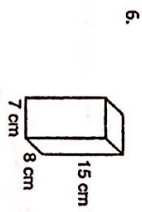




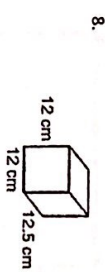
Name: _____

Date: _____ Period: _____





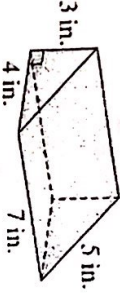

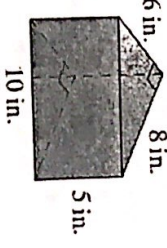




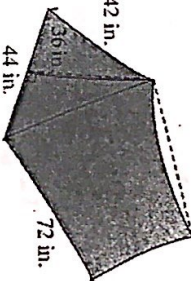
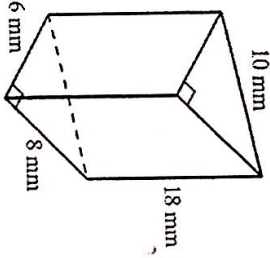
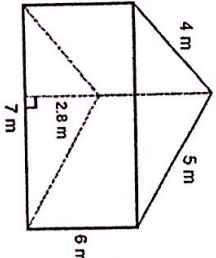
Practice with Surface Area of Triangular Prisms

Use the process developed during class to find the surface area of the following triangular prisms. Be sure to show all steps in a neat and organized way.

Name: _____
Date: _____ Period: _____

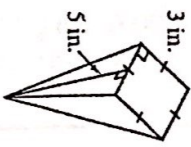
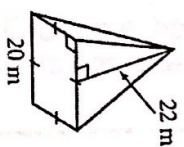
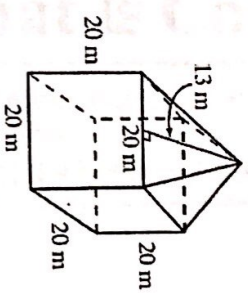
Name: _____
Date: _____ Period: _____

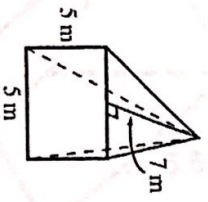
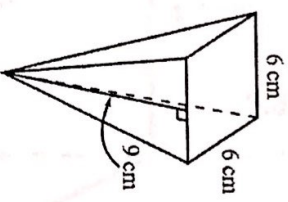
Wrapping Up Surface Area

Find the surface area of each three-dimensional figure. Show all steps and work to support your answers.

Name: _____ Date: _____ Period: _____

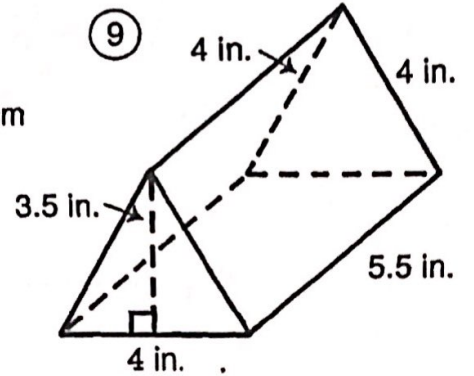
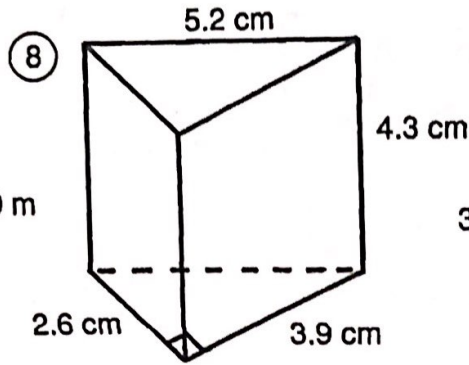
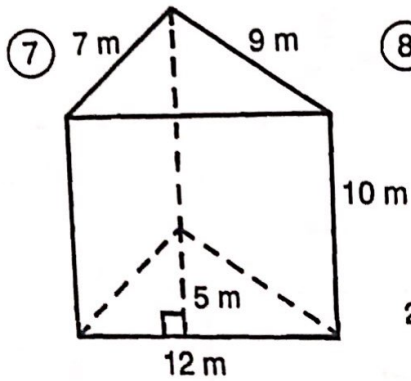
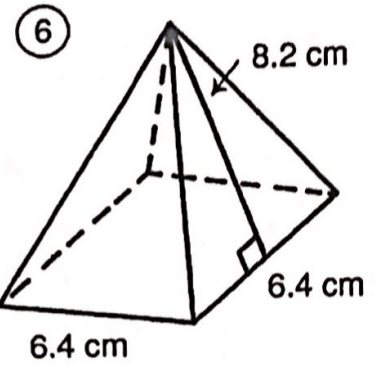
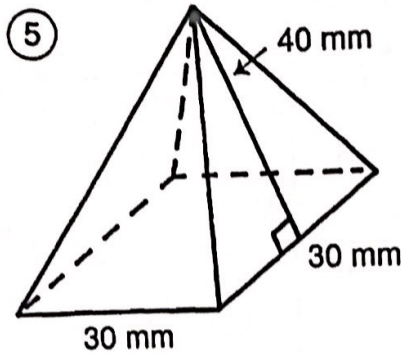
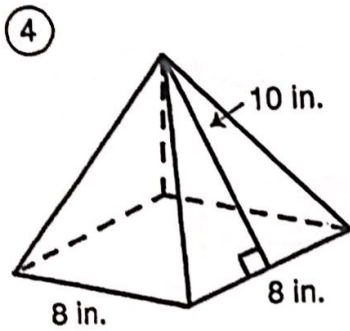
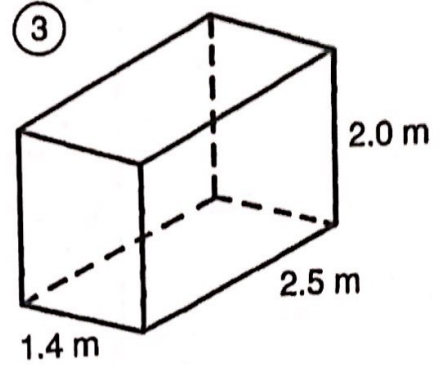
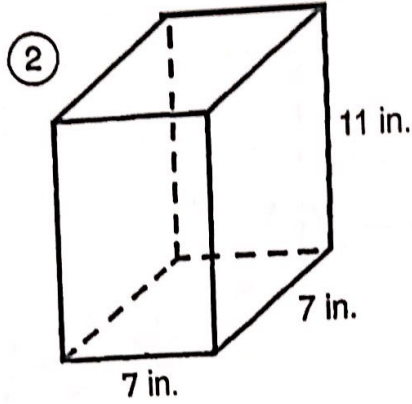
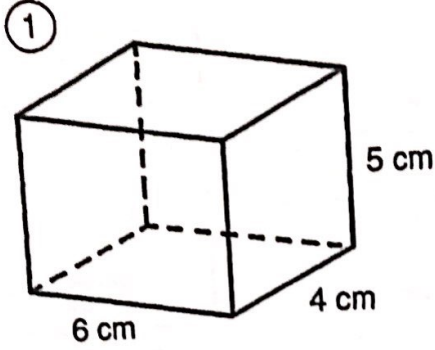
	
	
	

Name: _____ Date: _____ Period: _____

	
	
<p>If the length, width, and height of a rectangular prism are 4 yards, 8 yards, and 11 yards respectively, what would be the surface area?</p>	

What Is Cold And Comes In Cans?

Find the surface area of each figure. Cross out the box containing each correct answer. When you finish, write the letters from the remaining boxes in the spaces at the bottom of the page.



MU	RI	CH	OW	OP	FO	IL
340 m ²	224 in. ²	3,120 mm ²	148 cm ²	80 in. ²	3,300 mm ²	118 in. ²
IB	AR	CL	EA	CA	NS	KE
81.5 cm ²	22.6 m ²	60.45 cm ²	312 m ²	145.92 cm ²	25.8 m ²	406 in. ²

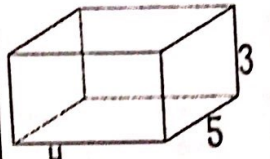
pages 5

SURFACE AREA OF PRISMS

Some boxes might not be used

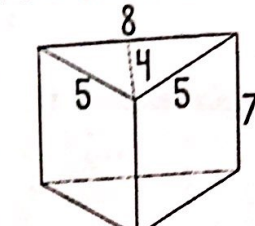
NAME _____

Find Total S.A.

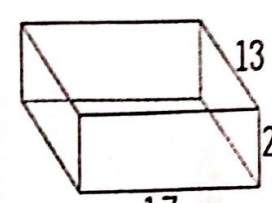


Start

Find Lateral S.A.



Find Total S.A.



102

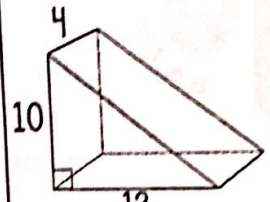
94

136

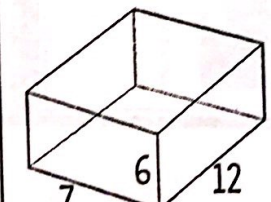
126

562

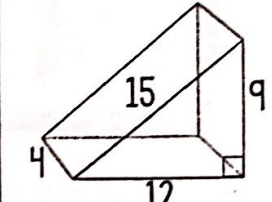
Find Total S.A.



Find Lateral S.A.



Find Total S.A.



220

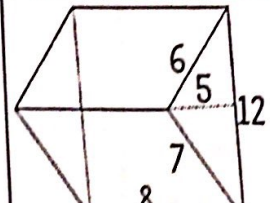
218

208

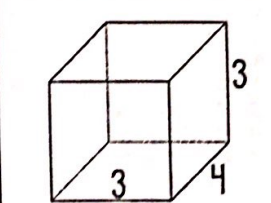
252

248

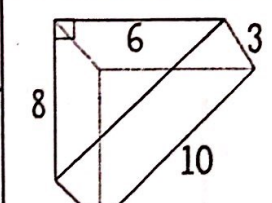
Find Lateral S.A.



Find Total S.A.



Find Lateral S.A.



200

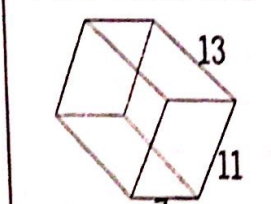
220

63

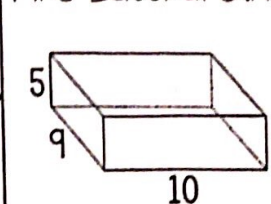
66

72

Find Total S.A.



Find Lateral S.A.



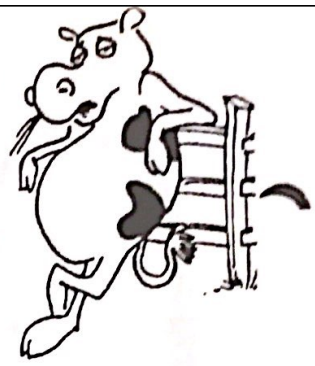
Finish

642

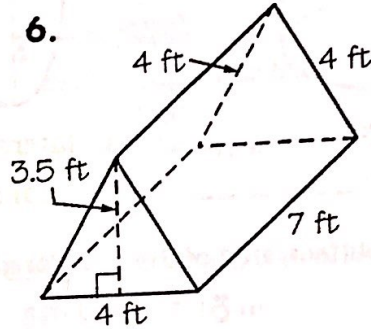
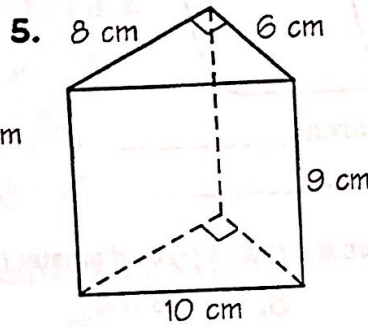
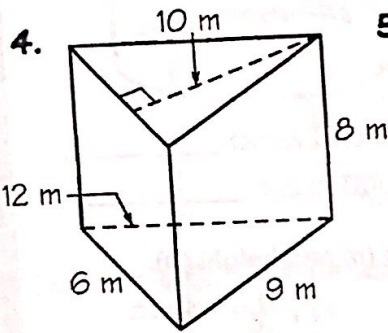
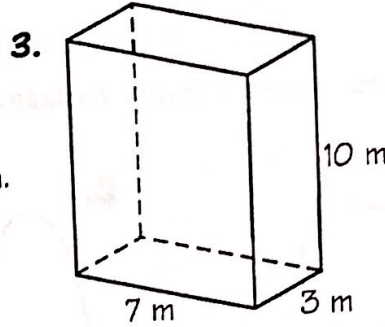
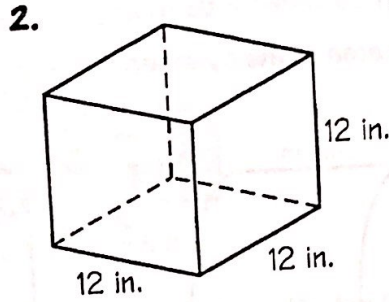
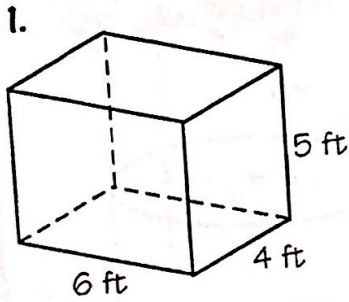
36

Why Did the Farmer's Daughter Watch the Lazy Cows?

Note the two letters next to each correct answer (some answers are rounded). Write these letters in the two boxes above the exercise number at the bottom of the page.



Find the surface area of the prism.

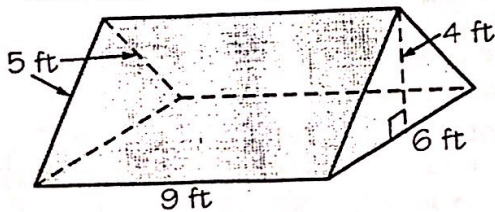


Solve.

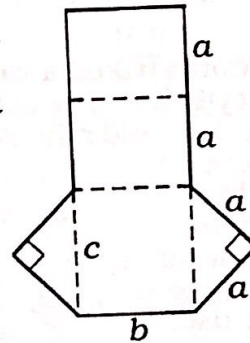
7. A cereal box is 7.4 in. wide, 9.6 in. high, and 2.5 in. deep. How many square inches of cardboard are needed to make this box?

8. A steel cargo container is shaped like a cube measuring 5.2 ft on each edge. How much steel is needed to make this container?

9. How much canvas is needed to make an A-frame tent that is 4 ft high with a rectangular floor 6 ft wide and 9 ft long?



10. What is the surface area of the triangular prism made by folding up this net? Given:
 $a = 20$ cm
 $b = 25$ cm
 $c = 28$ cm



11. A classroom measures 32 ft long, 25 ft wide, and 9 ft high. The combined area of doors and windows is 140 ft^2 . What is the remaining area of the four walls of the room?

12. A cube with 2-inch sides is placed on a cube with 3-inch sides. Then a cube with 1-inch sides is placed on the 2-inch cube. What is the surface area of the three-cube tower?

answers

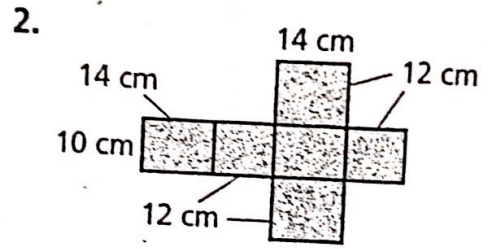
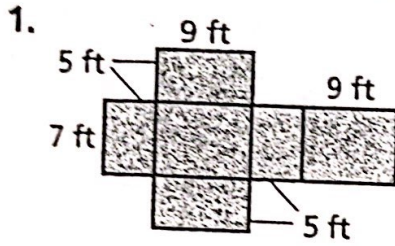
- AR** 259 m^2
- TO** 227.1 in.^2
- LL** 65 in.^2
- AT** 864 in.^2
- LO** 886 ft^2
- ON** 2240 cm^2
- SE** 148 ft^2
- TH** 273 cm^2
- AF** 98 ft^2
- TR** 932 ft^2
- ME** 168 ft^2
- UD** 858 in.^2
- HE** 276 m^2
- ET** 74 in.^2
- EL** 242 m^2
- SH** 162.2 ft^2
- NO** 232.5 in.^2
- IK** 2100 cm^2
- ED** 264 cm^2
- RE** 157 ft^2

8	3	10	5	7	1	12	4	9	2	11	6
---	---	----	---	---	---	----	---	---	---	----	---

GUIDED PRACTICE

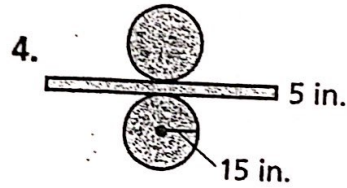
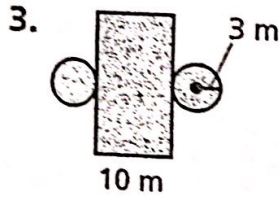
See Example 1

Find the surface area of the prism formed by each net.



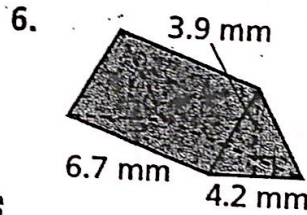
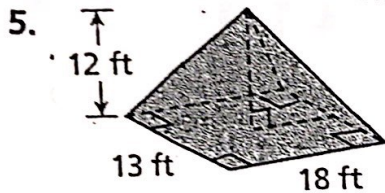
See Example 2

Find the surface area of the cylinder formed by each net to the nearest tenth. Use 3.14 for π .



See Example 3

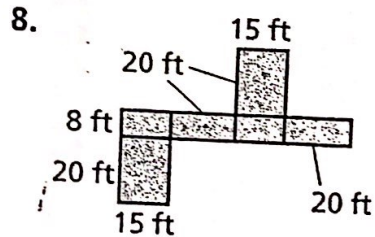
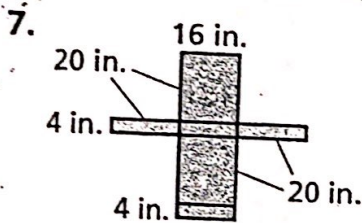
Find the surface area of each sphere to the nearest tenth. Use 3.14 for π .



INDEPENDENT PRACTICE

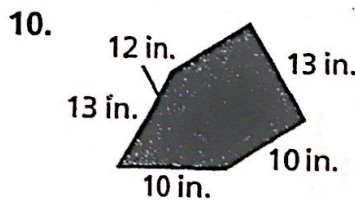
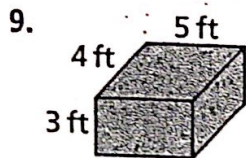
See Example 1

Find the surface area of the prism formed by each net.



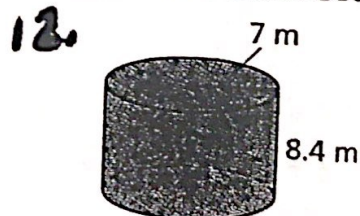
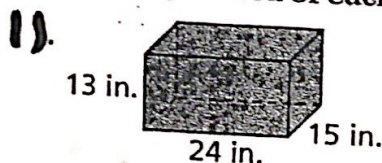
See Example 2

Find the surface area of the cylinder formed by each net to the nearest tenth. Use 3.14 for π .



See Example 3

Find the surface area of each sphere to the nearest tenth. Use 3.14 for π .



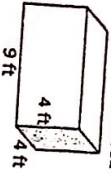
SURFACE AREA OF RECTANGULAR PRISMS & CYLINDERS

color by number!

Name: _____ Date: _____ Class Period: _____

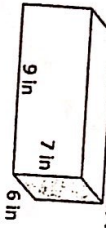
Directions: Find the surface area of the below figures (round to the nearest hundredth) and put your answer in the blanks. Then, color the objects in the picture accordingly.

1. Find the surface area of the prism below.



_____ (purple)

2. Find the surface area of the prism below.



_____ (dark blue)

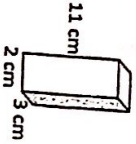
3. Find the surface area of a rectangular prism with a length of 10 inches, width of 5 inches, and height of 4 inches.

_____ (brown)

4. Find the surface area of a rectangular prism with a length of 21 feet, width of 6 feet, and height of 3 feet

_____ (orange)

5. Find the surface area of the rectangular prism below.



_____ (red)

6. Johnny wanted to wrap a present for his friend Suzie. If the box his present came in has dimensions 5.5cm, 4cm, and 16cm, what is the minimum amount of wrapping paper he needs to cover the box?

_____ (yellow)

7. The table below shows the dimensions of 3 rectangular prisms.

Rectangular Prism	Length (in feet)	Width (in feet)	Height (in feet)
1	8	5	3
2	1	11	12
3	2	13	6

Which rectangular prism has the smallest surface area? _____ (dark blue)

8. The dimensions of a cell phone are 5.44 inches by 2.64 inches by 0.27 inches. In square inches, what is the surface area of the phone?

_____ (black)

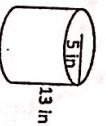
9. A fish tank with no top, is made of glass. How many square inches of glass was needed to build the tank if its length is 13 inches, width is 8 inches, and height is 6 inches?

_____ (brown)

10. A box of cereal is roughly 8 inches by 12 inches by 3.5 inches. About how many square inches of cardboard did it take to make the box?

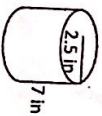
_____ (green)

11. Find the surface area of the cylinder below.



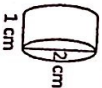
_____ (purple)

12. Find the surface area of the cylinder below.



_____ (orange)

13. A cylinder has a diameter of 2 cm and a height of 1 cm. What is its surface area?



_____ (yellow)

14. A cylinder has a diameter of 12 inches and a height of 3 inches. What is its surface area?

_____ (red)

15. A cylinder has a diameter of 15 cm and a height of 28 cm. What is its surface area?

_____ (light blue)

16. A soda company is using aluminum to build a soda can. If they want the radius of the can to be 1 inch and the height to be 4 inches, how many square inches of aluminum do they need to make a single can?

_____ (light blue)

17. A cylindrical tennis ball container is made entirely with plastic. If the diameter of the container is 2.7 inches and its height is 8.1 inches, find the surface area of the container.

_____ (black)

18. The Bean Coffee Shop covers its coffee cups for holiday seasons. Their cups are cylindrical, have a 2 inch radius, and a height of 6 inches. They are only planning to cover the side of their cups, not the bottom or top. How many square inches of material do they need to cover the side of 1 cup?

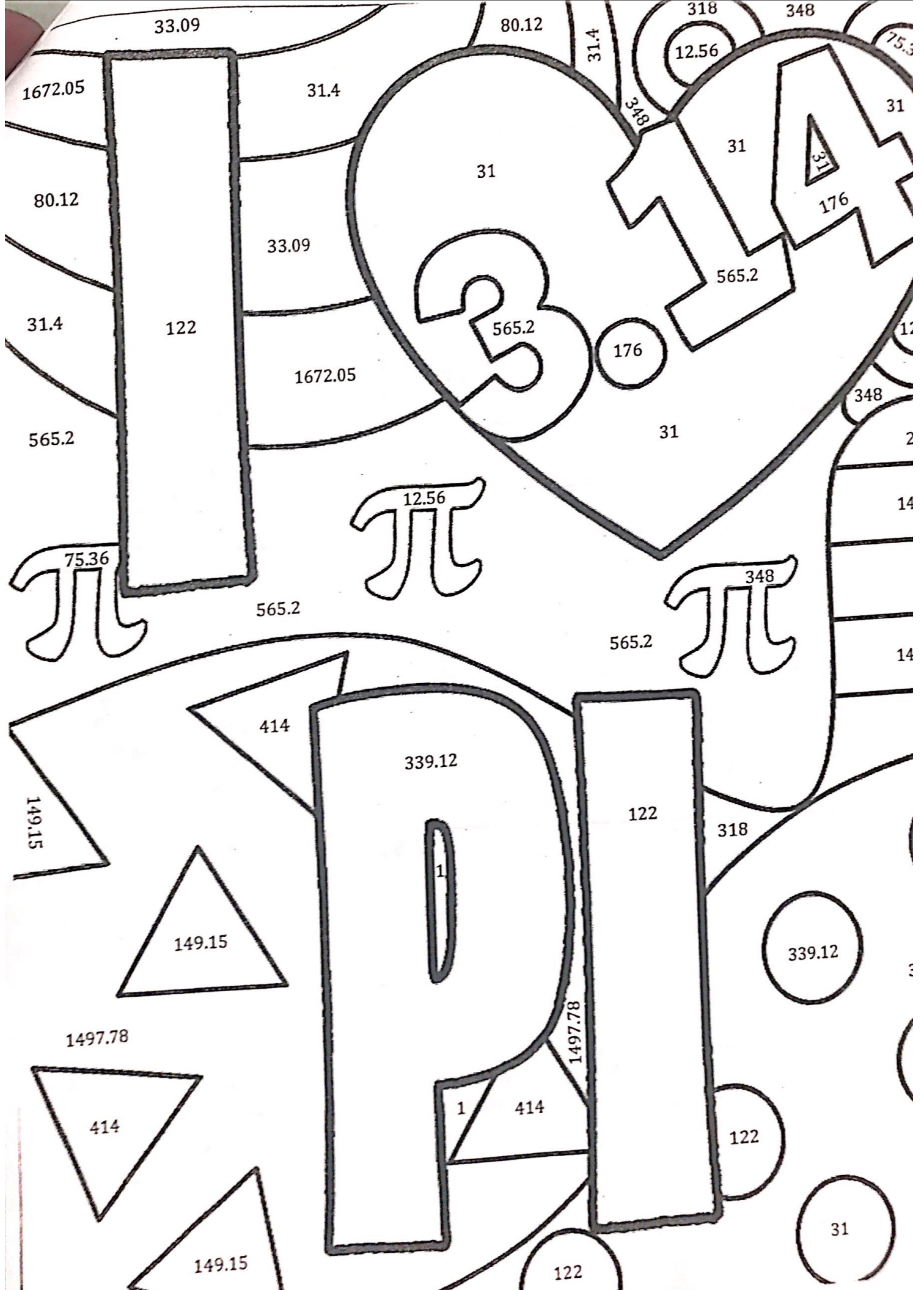
_____ (yellow)

19. After The Bean Coffee Shop covered the sides of its cups for the holiday season, they decided they also wanted to cover the bottom of their cups. If they are using the same cup from the previous problem and they have 400 square inches of material left, how many cups can they cover completely (remember, this time they are only covering the bottoms of the cups)?

_____ (red)

20. For a project, Johnny is making a cylinder flower pot for his friend Suzie. The pot has a bottom, but no top. If Johnny's pot has a height of 22cm and a diameter of 18cm, how many square centimeters of material does he need to make the pot?

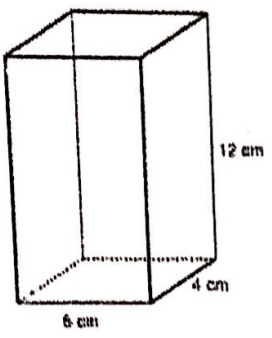
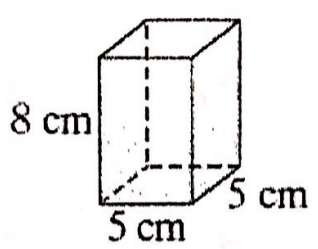
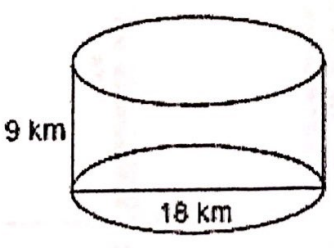
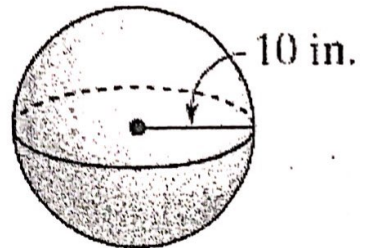
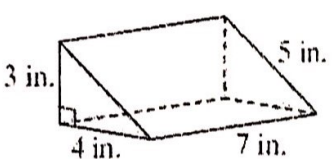
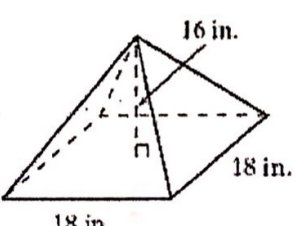
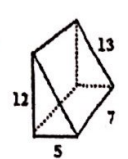
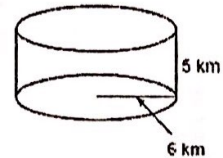
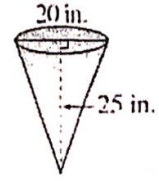
_____ (dark blue)



Name: _____ Date: _____

Surface Area Study Guide

Find the Surface Area of each Figure:

<p>1.)</p> 	<p>2.)</p>  <p>_____</p>	<p>3.)</p> 
<p>4.)</p> 	<p>5.)</p> 	<p>6.)</p> 
<p>7.)</p> 	<p>8.)</p> 	<p>9.)</p> 
<p>10.) A cone with a Radius of 4 cm and a Height of 8 cm</p>	<p>11.) A cube with a side of 24m</p>	<p>12.) A sphere with a diameter of 18 inches</p>