# TEST NAME: Surface Area Review \#1 

TEST ID: 3145906
GRADE: 07 - Seventh Grade
SUBJECT: Mathematics
TEST CATEGORY: School Assessment

Student:
Class:
Date:

1. A box manufacturer needs to make a cardboard box without a lid. The box must have a base of 4 feet by $\mathbf{3}$ feet and a height of $\mathbf{2}$ feet. How much cardboard will be needed to make the box?
A $12 \mathrm{ft}^{2}$
B. $28 \mathrm{ft}^{2}$
C. $40 \mathrm{ft}^{2}$
D. $52 \mathrm{ft}^{2}$
2. The surface area of a cube is $864 \mathbf{c m}^{\mathbf{2}}$. What must be the length of each edge?
A. 6 cm
B. 12 cm
C. 144 cm
D. 288 cm
3. What is the surface area of the rectangular solid below?


A 332 in. $^{2}$
B. $504 \mathrm{in}^{2}$
C. 664 in. $^{2}$
D. 1120 in. $^{2}$
4. Diane wants to decorate a rectangular box for a gift.


How many square inches of paper will she need to cover the surface area of the box that she found?
A. 89
B. 178
C. 336
D. 356
5. A box of powdered sugar has the dimensions shown below.


To prevent leaks, a plastic wrap covers the entire surface area of the box. What is the surface area of the box, in square centimeters?

A 290
B. 480
C. 580
D. 800
6. Mike plans to cover a box with fabric.


Which is closest to the number of square inches of fabric needed to cover the box?
A. 184
B. 192
C. 208
D. 228
7. Carmen plans to paint the inside of her swimming pool before she fills it. The pool is a rectangular prism with a length of 20 feet, a width of 10 feet, and a depth of 5 feet. (Note: the top of the pool is open and will not be painted.)


How many square feet of surface area will she paint?
A 300
B. 500
C. 700
D. 1000
8. Robert wants to wrap a present that is shaped like a right rectangular prism. Which whole number represents the total surface area, in centimeters (cm) squared, of the present?


A 210
B. 234
C. 318
D. 378
9. The length of a side of a cube is 4 in . What is the surface area of the cube?

A $\quad 16$ in. $^{2}$
B. 64 in. $^{2}$
c. 96 in. ${ }^{2}$
10. The top of the box below has been removed.


What is the surface area of the remaining box?

A $560 \mathrm{~cm}^{2}$
B. $800 \mathrm{~cm}^{2}$
C. $1,200 \mathrm{~cm}^{2}$

