TEST NAME: Surface Area Review #1

TEST ID: 3145906

GRADE: 07 - Seventh Grade

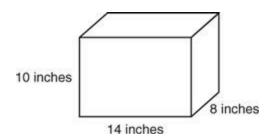
SUBJECT: Mathematics

TEST CATEGORY: School Assessment

05/22/19, Surface Area Review #1

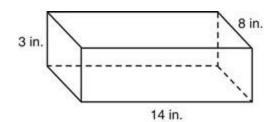
Student:		
Class:		
Date:		

- 1. A box manufacturer needs to make a cardboard box without a lid. The box must have a base of 4 feet by 3 feet and a height of 2 feet. How much cardboard will be needed to make the box?
 - A 12 ft^2
 - B. 28 ft^2
 - C. 40 ft^2
 - D. 52 ft²
- 2. The surface area of a cube is 864 cm². 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?



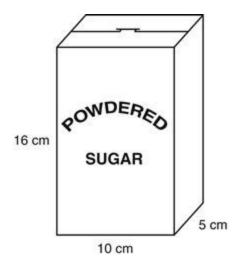
- A 332 in.^2
- B. 504 in.²
- C. 664 in.²
- D. 1120 in.²

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?

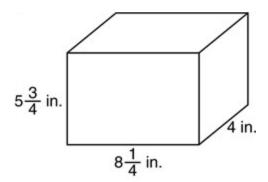
- A 89
- B. 178
- C. 336
- D. 356
- 5. A box of powdered sugar has the dimensions shown below.



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?

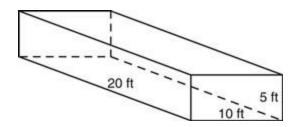
- A 290
- B. 480
- C. 580
- D. 800

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?

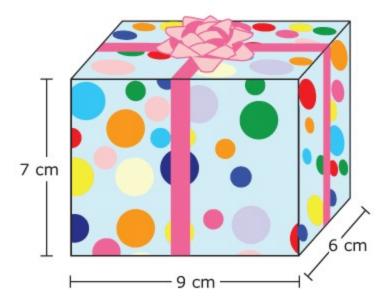
- A 184
- B. 192
- C. 208
- D. 228
- 7. Carmen plans to paint the inside of her swimming pool before she fills it. The pool is a rectangular prism with a length of 20 feet, a width of 10 feet, and a depth of 5 feet. (Note: the top of the pool is open and will not be painted.)



How many square feet of surface area will she paint?

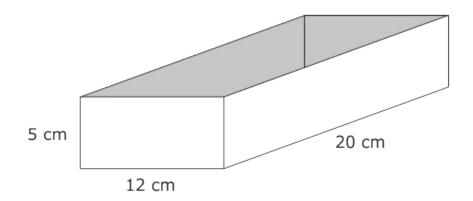
- A 300
- B. 500
- C. 700
- D. 1000

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 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 cm²
- B. 800 cm²
- c. 1,200 cm²