Name: _____ Class: _____ Date: _____ ID: A

Chapter 1 Test Review

Multiple Choice

Identify the choice that best completes the statement or answers the question.

1. Determine the value of $\sqrt{2.56}$.
   a. 0.64
   b. 1.6
   c. 0.16
   d. 0.8

2. Calculate the number whose square root is 8.1.
   a. 32.4
   b. 65.61
   c. 0.9
   d. 81

3. Which decimal has a square root between 15 and 16?
   i) 272.3
   ii) 196
   iii) 15.5
   iv) 233.5
   a. iv
   b. i
   c. ii
   d. iii

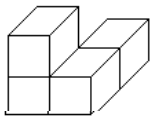
4. Which fraction has a square root between 3 and 4?
   i) $\frac{61}{7}$
   ii) $\frac{42}{5}$
   iii) $\frac{53}{5}$
   iv) $\frac{60}{7}$
   a. i
   b. iv
   c. ii
   d. iii

5. Estimate the value of $\sqrt{0.95}$, to the nearest tenth.
   a. 0.9
   b. 0.97
   c. 1.0
   d. 0.3

6. A square has an area of 27.8 cm^2.
   Determine the side length of the square, to the nearest millimetre.
   a. 5.27 cm
   b. 5 cm
   c. 5.2 cm
   d. 5.3 cm

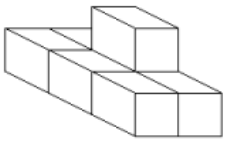
7. The lengths of the two legs of a right triangle are 6.5 cm and 3.2 cm.
   Determine the length of the hypotenuse to 1 decimal place.
   a. 3.1 cm
   b. 7.2 cm
   c. 5.7 cm
   d. 52.5 cm

8. This composite object is made using centimetre cubes. Determine its surface area.



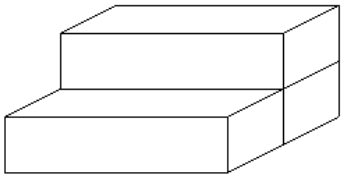
   a. 24 cm^2
   b. 20 cm^2
   c. 15 cm^2
   d. 18 cm^2

9. This object is made from 7 centimetre cubes. Determine its surface area.



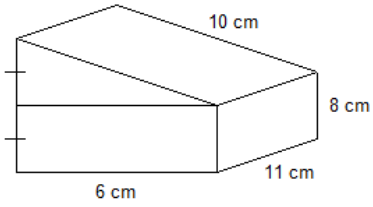
   a. 20 cm^2
   b. 28 cm^2
   c. 42 cm^2
   d. 26 cm^2

10. This object is made from 3 identical right rectangular prisms.
Each prism is 65 cm long and has square ends of side length 20 cm.
What is the surface area of the object?



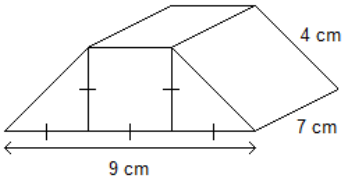
a. 10 200 cm^2
b. 18 000 cm^2
c. 12 800 cm^2
d. 11 600 cm^2

11. This object is composed of a right triangular prism on top of a right rectangular prism.
Determine the surface area of the object.



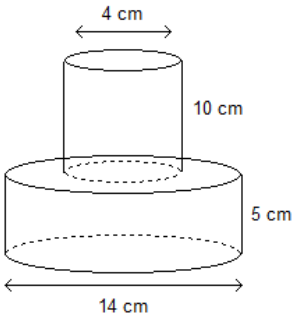
a. 342 cm^2
b. 584 cm^2
c. 728 cm^2
d. 518 cm^2

12. This object is composed of two right triangular prisms and a right rectangular prism.
Determine the surface area of the object.



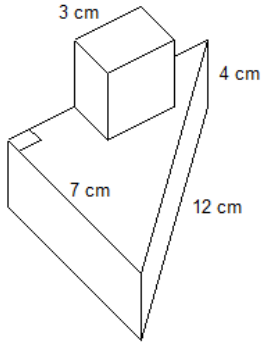
a. 176 cm^2
b. 113 cm^2
c. 158 cm^2
d. 212 cm^2

13. This object is composed of a cylinder of diameter 4 cm and height 10 cm on top of another cylinder of diameter 14 cm and height 5 cm.
Determine the surface area of the object, to the nearest square centimetre.



a. 500 cm^2
b. 657 cm^2
c. 661 cm^2
d. 653 cm^2

14. A 3-cm cube is attached to the top of a right triangular prism as shown.
Determine the surface area of the composite object, to the nearest square centimetre.



a. 219 cm^2
b. 185 cm^2
c. 228 cm^2
d. 210 cm^2

15. Determine the value of $\sqrt{0.25}$.
a. 0.05
b. 0.125
c. 0.5
d. 0.0625

16. Which numbers are perfect squares?
i) 42.25
ii) 32
iii) 28.9
iv) 3.24
a. i and ii
b. i and iv
c. ii and iii
d. i and iii

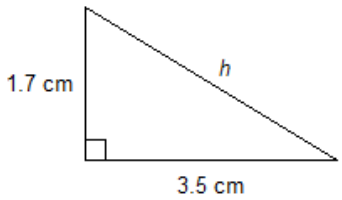
17. Determine the value of $\sqrt{\frac{50}{72}}$.
a. $\frac{5}{6}$
b. $\frac{5}{12}$
c. $\frac{25}{36}$
d. $\frac{10}{6}$

Short Answer

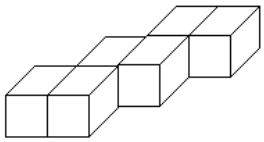
18. Determine the value of $\sqrt{2.89}$.

19. Determine the value of $\sqrt{\frac{289}{361}}$.

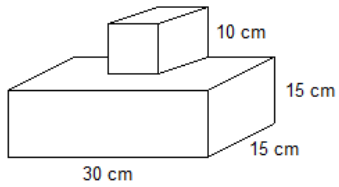
20. Determine the value of $\sqrt{0.27}$, to the nearest tenth.



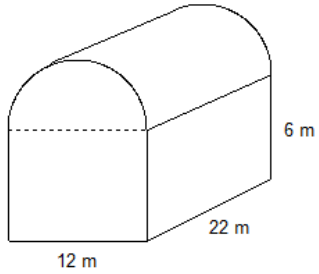
22. This composite object is made using centimetre cubes. Determine its surface area.



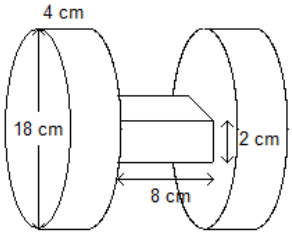
23. This object is composed of a cube on top of a right rectangular prism.
Determine the surface area of the object.



24. A barn is built in the shape of a right rectangular prism with a semi-circular roof.
Determine the surface area of the barn. Give your answer to the nearest whole number.



25. This object is composed of two identical cylinders connected by a right rectangular prism.
Each cylinder has diameter 18 cm and height 4 cm.
The rectangular prism has length 8 cm and square ends of side length 2 cm.
Determine the surface area of the object. Give your answer to the nearest whole number.



Problem

26. Determine the value of $\sqrt{\dfrac{\sqrt{81}+\sqrt{49}}{\sqrt{196}-\sqrt{100}}}$.

Multiple Choice Answers:

1. b	6. d or a	11. b	16. b
2. b	7. b	12. a	17. a
3. a	8. d	13. d	
4. d	9. d	14. a	
5. c	10. c	15. c	

Short answers:

18) 1.7	21) 3.89 cm	24) 936 m^2
19) 17/19	22) 26 cm^2	25) 1526 cm^2
20) 0.52	23) 2650 cm^2	