**Secondary Math 2 Unit 12 Review Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_**

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| 1) | Find the volume of the solid. The length of the base is $10 in$, the width of the base is $3 in$, and the height of the solid is $7 in$. | http://t0.gstatic.com/images?q=tbn:ANd9GcRgoNKtJ-VAZb9a3dW_2IXCz3PGSFAywtfBocSdzeBaBW640ULb:images.tutorvista.com/cms/images/67/rectangular-prism.png |
| A | $$V=20 in^{3}$$ | B | $$V=70 in^{3}$$ | C | $$V=100 in^{3}$$ | D | $$V=210 in^{3}$$ |
| 2) | A jar of peanut butter has a base with a radius of 4 cm and a height of 8 cm. Find the volume.  |
| A | $$V=32π cm^{3}$$ | B | $$V=128π cm^{3}$$ | C | $$V=\frac{32π}{3} cm^{3}$$ | D | $$V=\frac{128π}{3} cm^{3}$$ |
| 3) | Find the volume of the solid. The length of the base is $3 ft$, the width of the base is $4 ft$, and the height of the solid is $6 ft$. | http://t2.gstatic.com/images?q=tbn:ANd9GcQvdxjNsUAODZ0mCe-kmR9bmSUXhloZuX5ogkc70idB61dPFZZg:image.mathcaptain.com/cms/images/67/pyramid2.jpg |
|  | A $V=8 ft^{3}$ | B | $$V=13 ft^{3}$$ | C | $$V=24 ft^{3}$$ | D | $$V=72 ft^{3}$$ |
| 4) | Find the volume of the solid. The radius of the base is $6 cm$ and the height of the solid is $11 cm$. | http://t1.gstatic.com/images?q=tbn:ANd9GcScl5Ut-lHbK7fSIL3EtchEQOH-PaeDyWwRJLcZzEJZm8vuzTCc:moodle.tbaisd.org/pluginfile.php/68898/mod_book/chapter/51196/cone%2520ex%25202.jpg |
| A | $$V=396π cm^{3}$$ | B | $$V=22π cm^{3}$$ | C | $$V=66π cm^{3}$$ | D | $$V=132π cm^{3}$$ |
| 5) | Find the volume of the solid. The radius of the sphere is $2 m$. | http://upload.wikimedia.org/wikipedia/commons/thumb/0/07/Sphere_and_Ball.png/220px-Sphere_and_Ball.png |
| A | $V=8π m^{3}$  | B | $$V=\frac{16π}{3} m^{3}$$ | C | $$V=\frac{32π}{3} m^{3}$$ | D | $$V=\frac{8π}{3} m^{3}$$ |

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| 6) | Find the area of the polygon. Assume the measurements are given in miles. | SM2 Q1.4 Q1.PNG |
| A | $$A=6.5 mi^{2}$$ | B | $$A=13.5 mi^{2}$$ | C | $$A=7 mi^{2}$$ | D | $$A=14 mi^{2}$$ |

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| 7) | SM2 Q1.4 Q1.PNG | Find the area of the polygon. Assume the measurements are given in inches. |
| A | $$A=12 in^{2}$$ | B | $$A=12.5 in^{2}$$ | C | $$A=13 in^{2}$$ | D | $$A=13.5 in^{2}$$ |
| 8) | Find the area of the polygon. Assume the measurements are given in centimeters. | SM2 Q1.4 Q1.PNG |
| A | $$A=13 cm^{2}$$ | B | $$A=14.5 cm^{2}$$ | C | $$A=14 cm^{2}$$ | D | $$A=9.5 cm^{2}$$ |

9) A rectangular pyramid has a volume of 30 cubic inches. What is one possible set of dimensions for the pyramid?



10)

11) Two similar cones have heights 4 m and 12 m.

 **a.** What is the ratio of their heights?

 **b.** What is the ratio of their surface areas?

 **c.** What is the ratio of their volumes?

12) A greenhouse has the dimensions shown in the figure. What is the volume of the greenhouse? Round to the nearest cubic foot.

13) If you need 3 gallons of paint to cover a wall 10 feet high, how much paint would you need to cover a similar wall that is 15 feet high?

14-15: Find the volume.

14) 15)



16) A milk jug shaped like a cylinder has a base area of 100 cm2 and can hold 1500 cm3 of milk. The height of the juice container is:

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| 17) Find the diameter of a soccer ball with a volume of 1436.76 in3 to the nearest inch. |