

## Chapters 9 and 10 Test Review

Know:

- complement, supplement, similar triangles, types of triangles (pg 502)
- names of polygons (pg 510), names of quadrilaterals (pg 511)
- how to find the value of  $\pi$  on your calculator
- which angles are equal when parallel lines are intersected by a transversal
- how to find perimeters

Memorize

- 1 km = 1000 m, 1 m = 100 cm, 1 m = 1000 mm
- 1 kg = 1000g, 1 g = 1000 mg
- 1 L = 1000 mL
- $1 \text{ cm}^3 = 1 \text{ cc} = 1\text{mL}$
- 1 ft = 12 in
- 1 yd = 3 ft
- 1 lb = 16 oz
- Area of a rectangle =  $lw$
- Volume of a rectangle =  $lwh$
- Area of a triangle =  $\frac{1}{2}bh$
- Area of a circle =  $\pi r^2$
- Circumference of a circle =  $2\pi r$
- Pythagorean Theorem (only for right triangles):  $a^2 + b^2 = c^2$

Information that will be provided:

- 1 in = 2.54 cm
- 1 mi = 1.6 km
- $1 \text{ mi}^2 = 640 \text{ acres}$
- 1 kg = 2.2 lbs
- $\text{Population density} = \frac{\text{population}}{\text{area}}$
- $F = \frac{9}{5}C + 32, \quad C = \frac{5}{9}(F - 32)$
- The sum of the angles of a polygon with n sides =  $(n-2)180$
- Volume of a pyramid or cone =  $\frac{1}{3}(\text{area of the base})(\text{height})$
- Volume of a cylinder =  $(\text{area of the top})(\text{height})$
- Volume of a sphere =  $\frac{4}{3}\pi r^3$
- Surface area = the sum of the areas of the sides
- $\sin A = \frac{\text{side opposite angle } A}{\text{hypotenuse}}$
- $\cos A = \frac{\text{side adjacent angle } A}{\text{hypotenuse}}$
- $\tan A = \frac{\text{side opposite angle } A}{\text{side adjacent angle } A}$

Extra credit review problems (10 points, due when you take the test)

- 9.1: 3,7,12,17,23,29,34,47
- 9.2: 26,33
- 9.3: 3,8,19,35,46
- 10.1: 17,26,31
- 10.2: 6,7,13,23,29
- 10.3: 2,5,7,8,12,19,23,28,54
- 10.4: 4,12,15,19,24,26,35
- 10.5: 3,6,11,14,19,21,28,29
- 10.6: 3,12,17

Reminders

- Your calculator must have a  $\pi$  key. You also need sin, cos, tan, and  $\tan^{-1}$  (atan). Be sure your calculator is in degree mode (not radians). Bring your own calculator, as you may not share with another person during the test.
- You must label the units or points will be taken off.

General Info:

- No notes. A calculator is needed on this test. You may not use your cell phone.
- You have 50 minutes to take the test.
- Please do not talk to anyone about the test who hasn't taken it yet, as there are two sections of this class.