# **Ch. 11 Homework Packet**

You will attach Ch. 11 Calendar to this page!

# **Ch. 11 Homework Packet**

# DRHS



10) A rectangular prism has volume of 400  $m^3$ . If the length of the prism is 10 m and the width of the prism is 15 m, then what is the height of the prism? If needed, round to one decimal place.

### **Ch. 11 Homework Packet**

**DRHS** 

11) A soup can, shaped like a cylinder, has a volume of  $520 \text{ }mm^3$ . If the height of the soup can is 20 mm, then what is the radius of the soup can?

12) A triangle has two known sides with lengths of 10 cm and 12 cm. Which of the following lengths below could be the  $3^{rd}$  side? Choose all that apply.

A) 20 cm B) 2 cm C) 3 cm D) 21 cm E) 24 cm

13)  $\triangle ABC$  has coordinates A(-2, 4), B(3, -1), and C(1, 5). If  $\triangle ABC$  is dilated about the origin with a scale factor of 5, then what are the coordinates of A'?

14) Multiple choice: Given that  $\Delta WXY \sim \Delta HFG$ , then which proportion below is true?

A)  $\frac{WX}{HF} = \frac{WY}{HG}$  B)  $\frac{XY}{FG} = \frac{WX}{HG}$  C)  $\frac{WY}{FG} = \frac{WX}{HG}$ 

15) A circle has area of  $36\pi$  inches. What is its circumference, in terms of pi?



### **Ch. 11 Homework Packet**

DRHS

10) A cone has a volume of  $20\pi in^3$ . If the radius of the cone is 3 in, then find the height to one decimal place.

For #11 – 13, find each missing angle. Hint: use Soh-Cah-Toa.



#### For #14 – 15, find the area of each shape.





### **Ch. 11 Homework Packet**

DRHS

For #11 - 12: A cube has surface area of 96  $in^2$ .

- 11) Find the length of one side of the cube. 12) Find the volume of the cube.
- 13) Find DC (x) in the diagram below.







#### For #15 - 16, use the diagram shown of $\triangle XYZ$ .

15) Which is the largest angle?



16) Which is the smallest angle?

### **Ch. 11 Homework Packet**

**DRHS** 

### 11.4 Worksheet: Show your work!

Name\_\_\_\_







## **Ch. 11 Homework Packet**

# DRHS

#### For #9 – 10, find the surface area of each cone or square.







#### For #11 – 12, a sphere has a radius of 10 cm.

- 11) Find the surface area, rounded to one decimal place.
- 12) Find the volume, rounded to one decimal place.

For #13 – 16, find the VOLUME of each shape. (Hint: use formulas from 11.1 and 11.2.)





## Ch. 11 Homework Packet

### For #10 – 12, find the volume of each shape.

10) The base is square, rounded to one decimal place



11) rounded to one decimal place





13) Find the surface area of a sphere with a radius of 5 inches. Write your answer in terms of pi.

14) A sphere has a surface area of  $36\pi in^3$ . Find the radius of the sphere.

#### For #15 – 18, find the surface area of each shape.



16) in terms of pi



## **Ch. 11 Homework Packet**

17) the base is a square

Geometry



18) in terms of pi



For #19 – 20: A cube has surface area of 100  $m^2$ .

19) Find the length of one side of the cube.

20) Find the volume of the cube.

21) A rectangular prism has volume of 340  $cm^3$ . If the length of the prism is 8 cm and the height of the prism is 13 cm, then find the width of the prism. Round to one decimal place, if needed.

22) A cylinder has a volume of  $48\pi f t^3$ . If the radius of the cylinder is 4 ft, then find the height of the cylinder.

23) A cylinder has volume of  $50\pi in^3$ . If the height of the cylinder is 2 in, then find the radius of the cylinder.

DRHS

# **Ch. 11 Homework Packet**

DRHS

End of Ch. 10 Homework