

5/16/17 CCM6 and CCM6+

***Complete and check REVIEW for UNITS 12-13.***

1. Agenda...EOG G&SP due Mon...RETEST UNITS 12-13 tomorrow (study old tests and review sheet from today!)
2. You need a calculator and pencil for class.

Big Ideas of Unit 12...

**Area** formulas...rectangle, square, triangle

**Volume**...rectangular prisms

**Surface Area**...rectangular & triangular prisms  
and square pyramids

+tricky



## Big Ideas of Unit 13

**Measures:** mean, median, mode, range, lower quartile, upper quartile, minimum, maximum, MAD, IQR

**Graphs:** line plot/dot plot, box-and-whisker plot, histogram

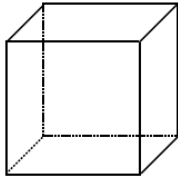
**Shape:** skewed, symmetrical, gap, cluster, peak

CCM6/6+ Q4 Cumulative Review (Units 12 and 13) Name \_\_\_\_\_

2016-17

Unit 12

- 1) Name the shape and identify the number of faces, edges, and vertices on the solid figure below.

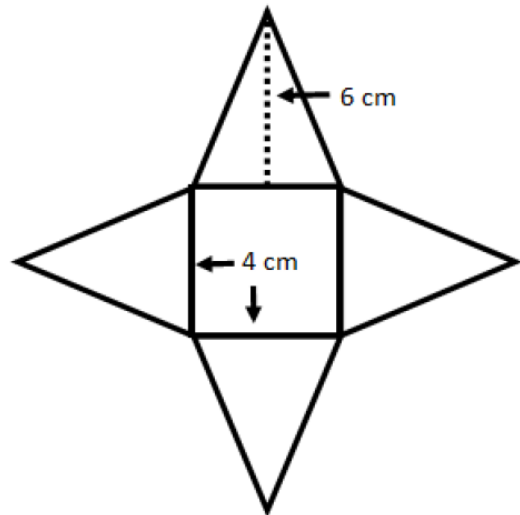
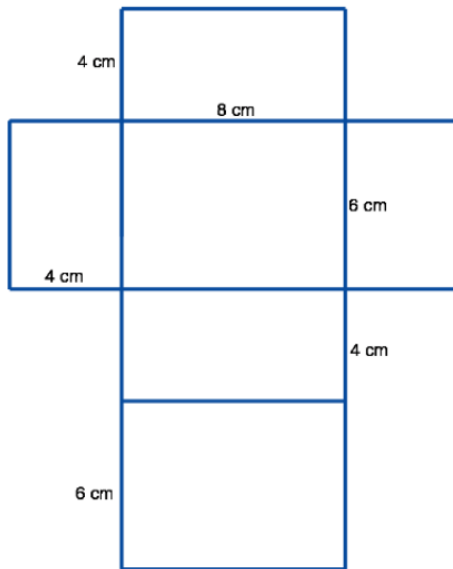


Shape name: \_\_\_\_\_ F: \_\_\_\_\_ E: \_\_\_\_\_ V: \_\_\_\_\_

- 2) Find the surface area of the net.      3) Find the surface area of the **square** pyramid.

SA: \_\_\_\_\_  $\text{cm}^2$

SA: \_\_\_\_\_  $\text{cm}^2$



- 4) Tommy bought a rectangular trunk that has a length of 5 feet, a width of 4 feet, and a height of 2 feet. Find the volume of Tommy's trunk. Find the surface area of Tommy's trunk. Show your work.

V= \_\_\_\_\_  $\text{ft}^3$

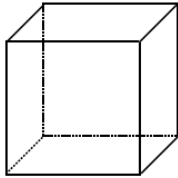
SA = \_\_\_\_\_  $\text{ft}^2$

CCM6/6+ Q4 Cumulative Review (Units 12 and 13) Name \_\_\_\_\_

2016-17

Unit 12

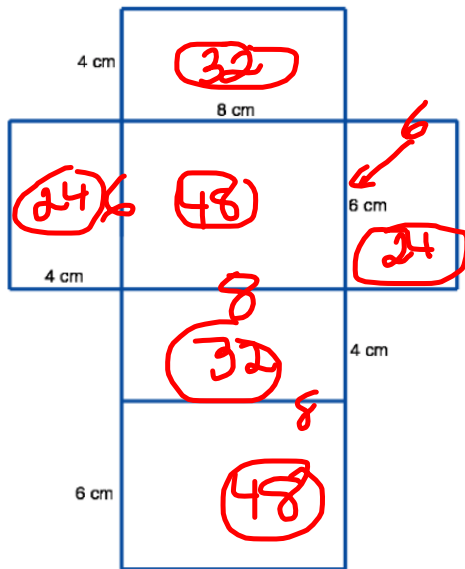
- 1) Name the shape and identify the number of faces, edges, and vertices on the solid figure below.



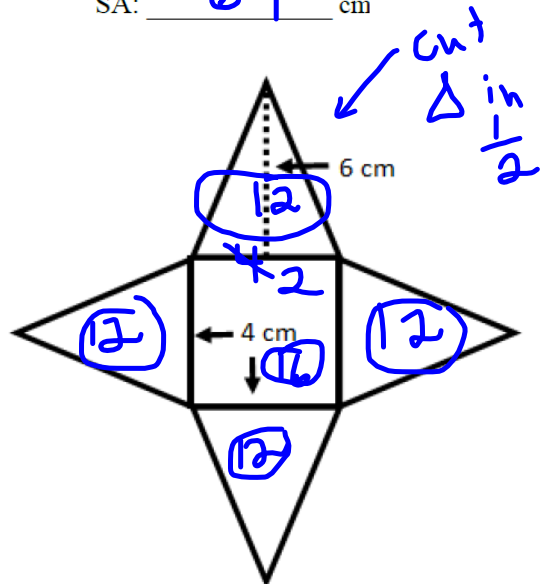
Shape name: cube  
rectangular prism F: 6 E: 12 V: 8

- 2) Find the surface area of the net.      3) Find the surface area of the square pyramid.

SA: 208 cm<sup>2</sup>

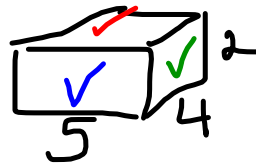


SA: 64 cm<sup>2</sup>



- 4) Tommy bought a rectangular trunk that has a length of 5 feet, a width of 4 feet, and a height of 2 feet. Find the volume of Tommy's trunk. Find the surface area of Tommy's trunk. Show your work.

$$V = 5 \times 4 \times 2$$



$$\begin{array}{r} F \quad 5 \times 2 = 10 \\ B \quad \quad = 10 \\ L \quad 4 \times 2 = 8 \\ R \quad \quad = 8 \\ \hline T \quad 5 \times 4 = 20 \\ + B \quad \quad = 20 \\ \hline \end{array}$$

V = 40 ft<sup>3</sup>

SA = 76 ft<sup>2</sup>

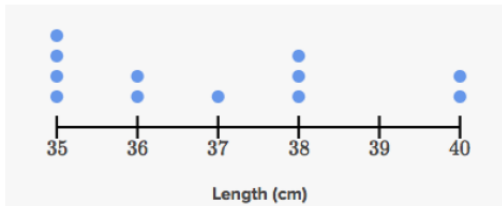
- 5) A rectangular prism has a volume of  $36 \text{ in}^3$ , a length of 3 in and a width of 4 in. What is the height of the prism?
- 6) A cube has dimensions  $2 \frac{1}{2}$  in by  $\frac{1}{2}$  in by  $3 \frac{1}{2}$  in. How many cubes with an edge length of  $\frac{1}{2}$  in will fit inside?

**Unit 13**

Analyze a set of data (Show all work if necessary):

Use the line plot below (length cm) for questions 7-12.

*Nearest ten*



- 7) Mean= \_\_\_\_\_ 8) Median= \_\_\_\_\_ 9) Mode= \_\_\_\_\_ 10) Range= \_\_\_\_\_

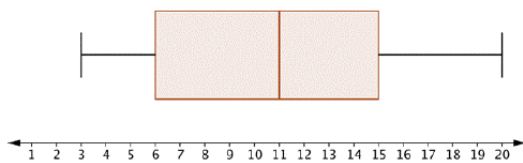
- 11) Do you think there's an **outlier**? **Yes** **No** What is it? \_\_\_\_\_

**Explain:** \_\_\_\_\_

- 12) Which measure of "center" is best for this set of data? \_\_\_\_\_

*(mean or median)*

- 13) Which data set matches the box-and-whisker plot below?



- A. 3, 6, 7, 9, 11, 12, 14, 14, 20  
 B. 3, 5, 7, 9, 11, 12, 14, 16, 20  
 C. 2, 5, 7, 9, 11, 13, 15, 15, 20  
 D. 3, 4, 8, 8, 11, 11, 15, 15, 18

- 5) A rectangular prism has a volume of  $36 \text{ in}^3$ , a length of 3 in and a width of 4 in. What is the height of the prism?

$$36 = 3 \times 4 \times \underline{\hspace{1cm}}$$

$$36 = 12 \times \underline{3}$$

- 6) A cube has dimensions  $2 \frac{1}{2}$  in by  $\frac{1}{2}$  in by  $3 \frac{1}{2}$  in. How many cubes with an edge length of  $\frac{1}{2}$  in will fit inside?

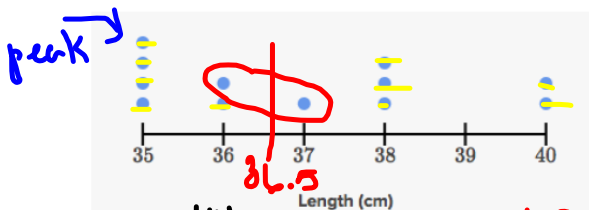
right size cubes →

$$\frac{5}{2} \times \frac{1}{2} \times \frac{7}{2} \rightarrow 35$$

Unit 13

Analyze a set of data (Show all work if necessary):

Use the line plot below (length cm) for questions 7-12.



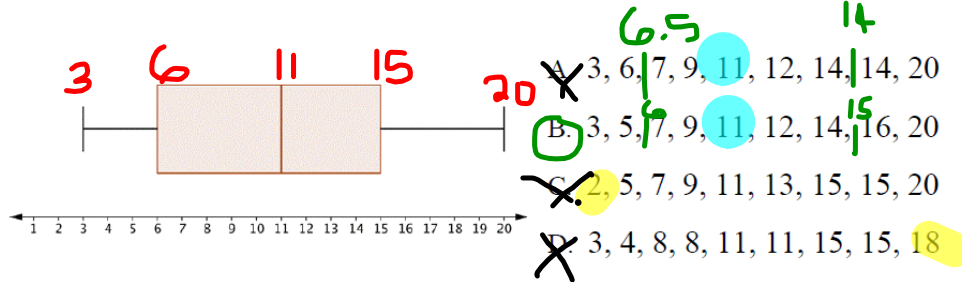
7) Mean =  $\frac{442}{12} = 36.8$     8) Median =  $36.5$     9) Mode =  $38$     10) Range =  $40 - 35 = 5$

- 11) Do you think there's an outlier? Yes  No  What is it? \_\_\_\_\_

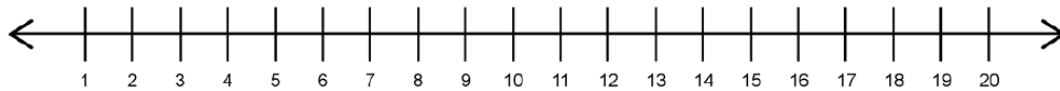
Explain: Not a big gap

- 12) Which measure of "center" is best for this set of data? mean  
(mean or median) no outlier

- 13) Which data set matches the box-and-whisker plot below?



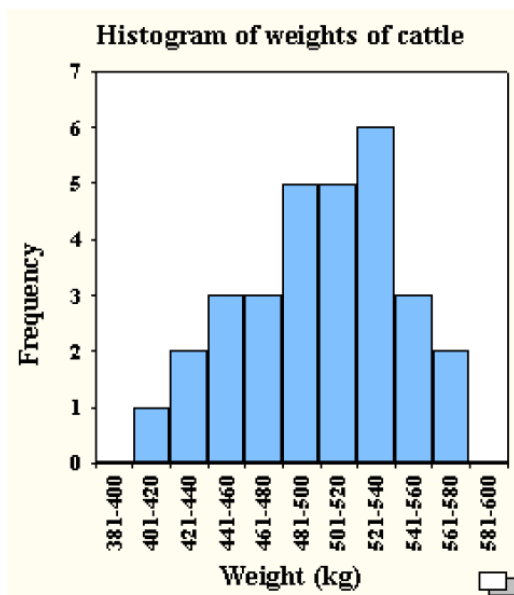
14) Create a box-and-whisker plot from the following set of data: 3, 5, 7, 9, 11, 11, 12



Minimum= \_\_\_\_\_ Q1= \_\_\_\_\_ Median= \_\_\_\_\_ Q3= \_\_\_\_\_ Maximum= \_\_\_\_\_

15) What is the **interquartile range (IQR)** of the set of data from question 14? \_\_\_\_\_

16) Use the histogram below, which weight interval has the median?  
Median interval: \_\_\_\_\_



17) Quiz grades: **52, 60, 90, 98, 100**  
Find the M.A.D of student quiz grades.  
Round to the nearest tenth if necessary.

Mean quiz grade= \_\_\_\_\_

DATA	Data - Mean	Absolute Value
52		
60		
90		
98		
100		

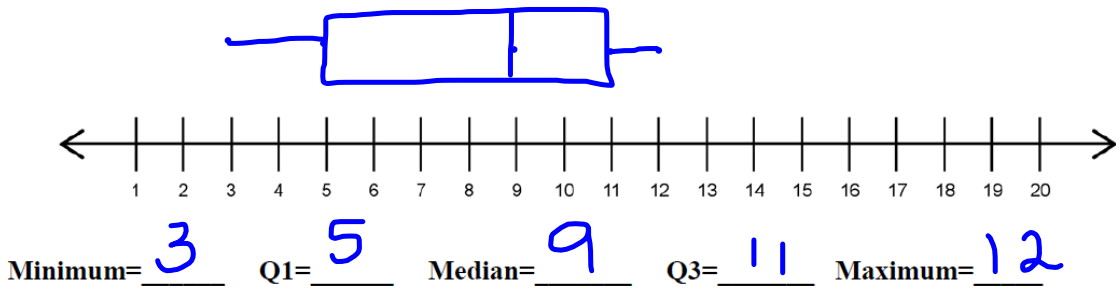
M. A. D. = \_\_\_\_\_

18) You got the following grades on your ELA quizzes: 92, 88, 90, and 100. What grade must you get (the minimum grade needed) on the fifth and final quiz to have a mean of 93 on your quizzes?

- A. 83                      B. 87                      C. 91                      D. 95

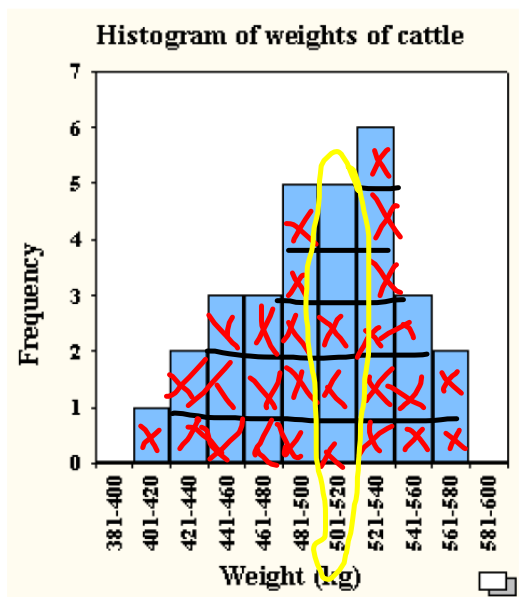


14) Create a box-and-whisker plot from the following set of data: 3, 5, 7, 9, 11, 11, 12



15) What is the interquartile range (IQR) of the set of data from question 14?  $11 - 5 = 6$   
range of box

16) Use the histogram below, which weight interval has the median?  
 Median interval: 501-520



17) Quiz grades: 52, 60, 90, 98, 100  
 Find the M.A.D of student quiz grades.  
Round to the nearest tenth if necessary.  
 Mean quiz grade=  $\frac{400}{5} = 80$

DATA	Data - Mean	Absolute Value
52	$52 - 80$	28
60	$60 - 80$	20
90	$90 - 80$	10
98	$98 - 80$	18
100	$100 - 80$	20

M. A. D. =  $\frac{96}{5} = 19.2$

total = 370

18) You got the following grades on your ELA quizzes: 92, 88, 90, and 100. What grade must you get (the minimum grade needed) on the fifth and final quiz to have a mean of 93 on your quizzes?

- A. 83                      B. 87                      C. 91

D. 95                       $93 \times 5 = 465$   
 total

$465 - 370 = 95$

**ANYTHING ELSE** you want to **REVIEW?**

**Q4 RETEST is TOMORROW!**