

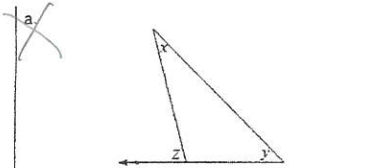
# Calculator

Secondary Math 2  
Unit 5 Geometry and Proof Test  
Part I: Matching

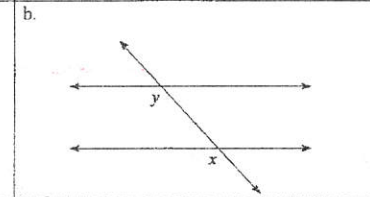
Name: \_\_\_\_\_  
Date: \_\_\_\_\_ Per: \_\_\_\_\_

Match each word/concept on the left with the picture depicting that word/concept that on the right.

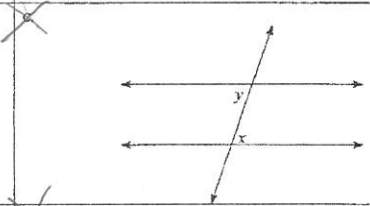
1) Alternate interior angles



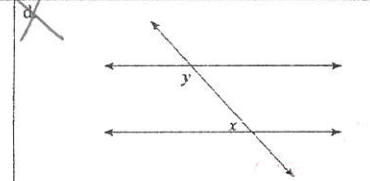
2) Vertical angles



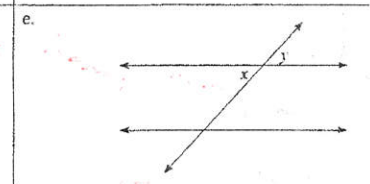
3) Corresponding angles



4) Exterior and remote interior angles of a triangle



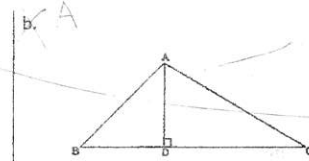
5) Same side interior angles



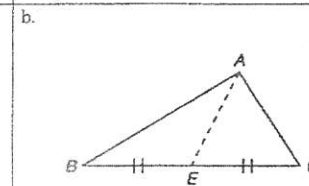
Secondary Math 2  
Unit 5 Geometry and Proof Test

Name: \_\_\_\_\_  
Date: \_\_\_\_\_ Per: \_\_\_\_\_

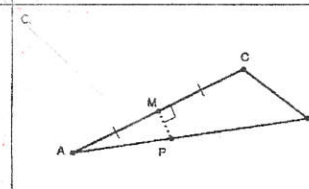
6) Median



7) Altitude



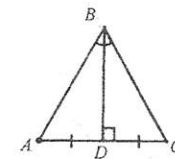
8) Perpendicular bisector of a side



Part II: Multiple Choice

9) When comparing  $\overline{BD}$  to  $\triangle ABC$ , then  $\overline{BD}$  is a

- a. Altitude
- b. Median
- c. Angle Bisector
- d. Perpendicular bisector of a side
- e. All of the above



10) If you know that  $\triangle ABC \cong \triangle XYZ$ , what else do you know to be true?

- a.  $\angle A \cong \angle Z$
- b.  $\angle B \cong \angle Y$
- c.  $\overline{BC} \cong \overline{XY}$
- d.  $\overline{AC} \cong \overline{YZ}$



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Total Pts	Calc Score
1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	2	2	2	2	25	44%
1	1	1	1	1	1	0	0	2	1	1	0	0	1	0	0	0	0	0	11	

Calculator

Secondary Math 2  
Unit 5 Geometry and Proof Test

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Per: \_\_\_\_\_

Part III: Short Response

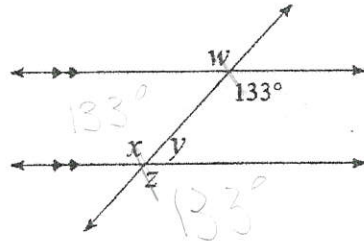
Use the figure to the right to answer questions 11-14.

11) What is the measure of angle  $w$ ?

12) What is the measure of angle  $x$ ?

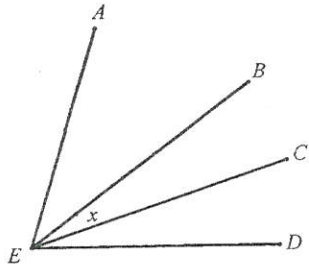
13) What is the measure of angle  $y$ ?

14) What is the measure of angle  $z$ ?



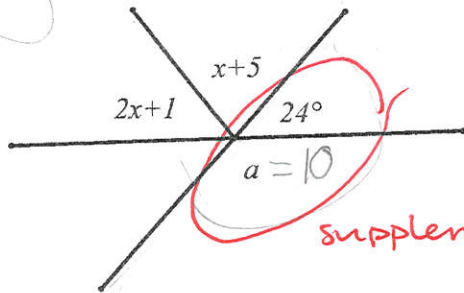
15) You know that  $\angle AED = 80^\circ$ . You also know that  $\overline{BE}$  bisects  $\angle AED$  and that  $\overline{CE}$  bisects  $\angle BED$ .

Find  $x$ .



what does bisect mean?  
Trace the diagram and mark it up

16) Find the measure of  $a$  in the diagram below.



$$2x+1 + x+5 + 24$$

$$\frac{3x+30}{3} \quad \frac{30}{3}$$

supplementary

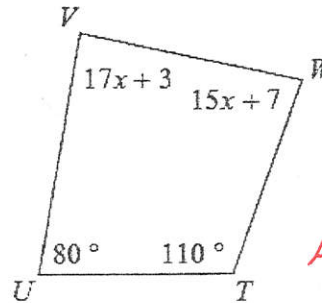
Secondary Math 2

Unit 5 Geometry and Proof Test

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Per: \_\_\_\_\_

17) Find the measure of angle  $W$  in the diagram below.



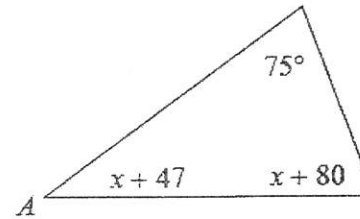
Quadrilateral Sum

~~$$17x+3 + 15x+7$$~~

$$\frac{15x+7}{15} \quad \frac{15x+7}{15}$$

Angles add to...

18) Find the measure of angle  $A$  in the diagram below.



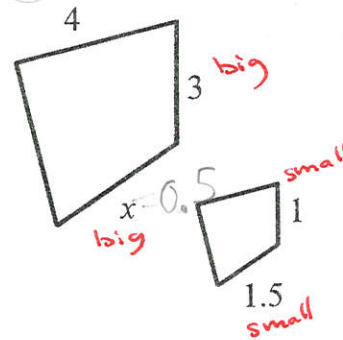
Triangle Sum Theorem  
Angles add to...

$$x+47 + x+80 + 75 = ?$$

$$2x = 202$$

$$x = 101$$

19) Similar shapes are shown below. Find the value of  $x$ .



small = small

$$\frac{1}{3} \cdot \frac{x}{1.5} = \text{big}$$

$$\frac{1.5}{3} = \frac{3x}{3}$$

$$x = 0.5$$

Staple!

23/38 (60.5%)

Written (staple on front)

+ 5 review

Calc: 11 + 12

Secondary Math 2  
Unit 5 Geometry and Proof Test

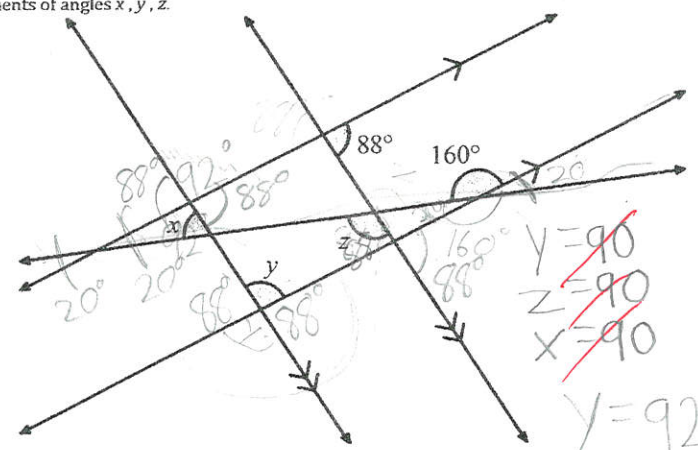
Name: [Redacted]  
Date: 3-9-2016 Per: 8

Secondary Math 2  
Unit 5 Geometry and Proof Test  
Part IV: Proofs

Name: [Redacted]  
Date: 3-7-2016 Per: 8

20. Find the measurements of angles x, y, z.

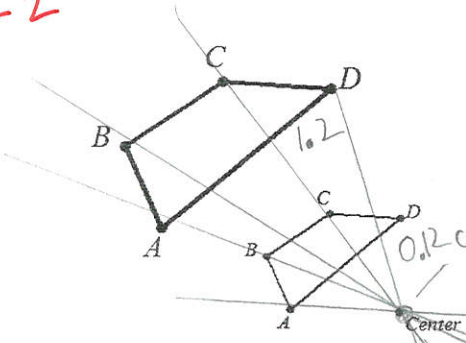
-6



For questions 21 - 22 determine if the requested dilation has occurred (you can use a ruler).

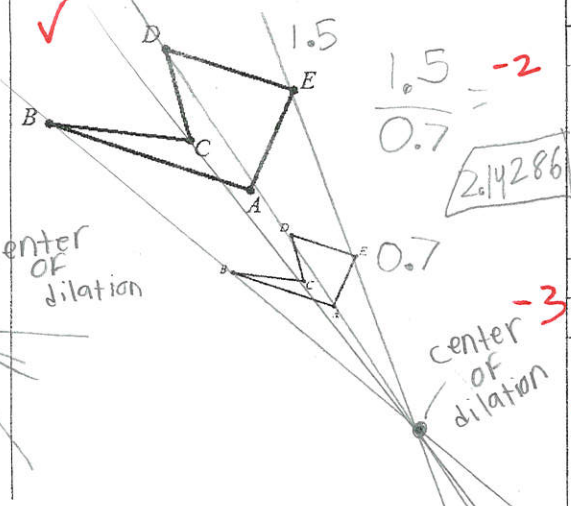
21. Ratio: 2

-2



22. Ratio: 1/2

✓

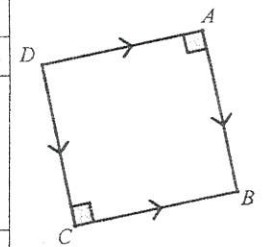


Quadrilaterals can be classified into many different categories. Below is a list of some of those categories. For each category, decide if the figure drawn fits into each category.

- If the answer is "Yes" you must prove it using evidence from the picture as well as various properties we have discussed in class.
- If the answer is "No" you must say why not by using evidence from the picture as well as various properties we have discussed in class.
- If the answer is "Maybe" make sure you explain what information is present to make you think the shape might fit in a category, as well as what information is missing to convince you of that fact.

Be careful! If you make a claim that isn't specifically shown on the figure (perhaps about an angle measure, or a side length) make sure you clearly explain how you know your claim is true using different properties.

23) Parallelogram
Yes / No / Maybe
Explain: DC and AB are parallel DA and CB are also parallel
24) Rectangle
Yes / No / Maybe
Explain: $\angle A$ and $\angle C$ are $90^\circ$ but $\angle D$ $\angle B$ haven't been marked. Can you prove they are $90^\circ$ ?
25) Square
Yes / No / Maybe
Explain: <del>All the sides are equal</del> , there are 4 sides. There are only two $90^\circ$ angles for sure, but we have enough to prove it's a square anyway



Not marked, so you have to prove it.

March 22, 2016

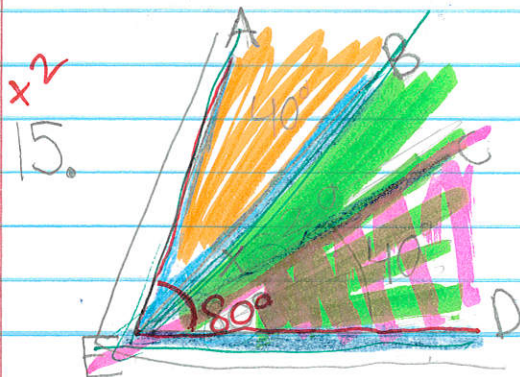
P. 9

test corrections unit 5 test

x1 12.  $X = 133^\circ$

$180^\circ$   
 $- 133^\circ$   
 $\hline 47^\circ$

x1 13.  $y = 47^\circ$

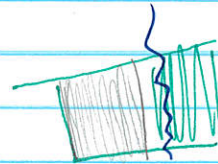


$\overline{BE}$  bisects  $\angle AED$   
 $\overline{CE}$  bisects  $\angle BED$

$x = \angle BEC$

$\angle 40$

$x = 20^\circ$

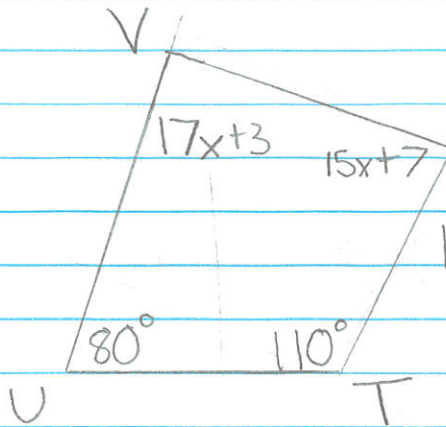


x2 16.

$180^\circ$   
 $- 24^\circ$   
 $\hline 156^\circ$

x2

17.



$$\boxed{W=82}$$

$$17x+3+15x+7+80^\circ+110^\circ=360^\circ$$

$$32x+200=360$$

$$-200 \quad -200$$

$$32x=160$$

$$\frac{32}{32} \quad \frac{160}{32}$$

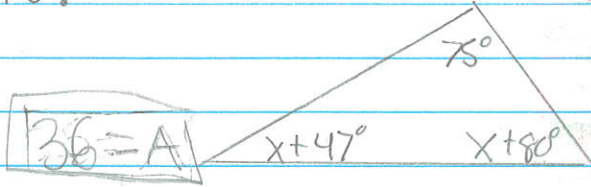
$$\boxed{x=5}$$

$$5(5)+7=W$$

$$\boxed{W=82}$$

x2

18.



$$75 + x + 80 + x + 47 = 180^\circ$$

$$2x + 75 + 80 + 47 = 180^\circ \quad -11 + 47 = 36$$

$$2x + 202 = 180^\circ$$

$$-202 \quad -202$$

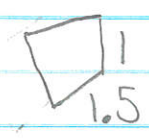
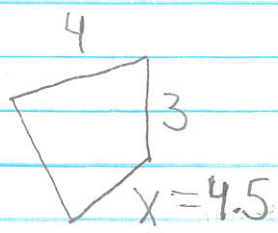
$$\frac{2x}{2} \quad \frac{-22}{2}$$

$$\boxed{x=-11}$$

$$\boxed{A=36}$$

~~x=2~~

19.



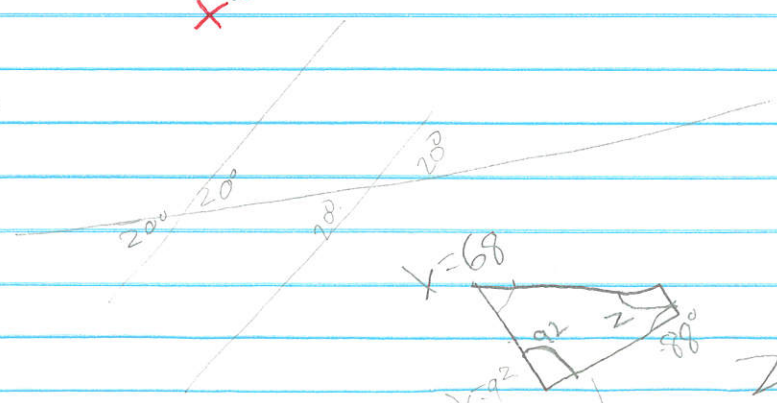
$$\frac{1 \cdot 1.5}{3 \cdot x} =$$

$$\frac{3}{1} = \frac{x}{1.5}$$

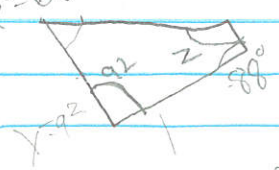
$$x = 4.5$$



~~x=6~~



$$x = 68$$



$$z = 112$$

$$360^\circ$$



$$\frac{+18 \text{ corrections}}{2} = +9 \text{ points}$$

$$32/38 \quad 84.2\%$$

$$\frac{32 + 2.5}{38} = 90.8\%$$