Geometry Part I Exam Review

Can you apply what you know?

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Block\_\_\_\_

Date of A Day Exam: Wednesday, January 21

Date of B Day Exam: Thursday, January 22

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| **1-3: Use the given figure to answer each question.**1. What is the intersection of plane P and Plane ACD?
2. Name 3 collinear points.
3. How many planes can be drawn

through points A, B, and C?**4-6: Use the given segment to answer each question.**-18WXY-10221. WY = \_\_\_\_\_\_\_\_.
2. Find the midpoint of .
3. If X is the midpoint of, find the coordinate of T.

**7-12: Use the given points to answer each. A(-2, 5), B(-3, 8)**1. Find the midpoint of.
2. Find the length of.
3. Find the slope of.
4. Find the slope of a line perpendicular to.
5. Find the slope of a line parallel to.
6. Write the equation line going through A and B.
7. Find x and m∠1.

 39°(2x - 7)° 11. In the figure, if ∠1 and ∠3 are supplementary,

 134 52 67 then ∠1 and \_\_\_\_\_\_\_are supplementary.**25-29: Given:**  **If** **m ⊥ n, then ∠3 ≅ ∠4**  **Write each statement.**1. The hypothesis
2. The conclusion
3. The inverse
4. The converse
5. The contrapositive

URS1 2 1. If ∠1 ≅ ∠2, m∠1 = 6x –30 and

m∠URS = 5x + 24, then x = \_\_\_. 1. In #30, if m∠URS = 90, then ∠1 and ∠2

are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ angles.**32-34: Draw a Venn Diagram for each question below.**1. All dogs love bones
2. Most teachers are caring.
3. No students are seniors.

**35-37: Use the figure to answer each question.**1. Name a plane parallel to plane QPS.
2. Name a segment parallel to
3. Name a segment skew to

1200 y°1. What does y have to be for

 the picnic tabletop to be parallel to the ground? 1. For the staircase shown, what value

470xº*railing→**runner→* of x would make the railing parallel to the runner? 1. If two sides of a triangle have lengths 7 and 13, what is

 the range of the third side.1. In an isosceles right triangle, the measure of each acute

 angle is\_\_\_\_\_\_\_\_\_\_. 12341. If m∠3 = 65, then m∠1 is \_\_\_\_\_\_\_\_\_.
2. In an equilateral triangle, the measure of each angle is\_\_\_\_\_\_\_\_.

**54-57: Do the 3 side lengths form a triangle? Show work to**  **justify your answer.**1. 1, 1, and 3
2. 1, 2, and 3
3. 1, 2, and 2.4
4. 7, 8, and 17
5. Which two cities are farthest apart?

*Madrid*54°58°*London**Paris* 1. In isosceles triangle DEF, DE = DF. If DE = 2x + 14,

DF = 5x –1, and EF = 2x + 3, then the perimeter of triangle DEF is\_\_\_\_\_\_\_.1. What is the approximate length of?

ACB22 in.8 in. 1. If ΔIGH ≅ ΔKLJ, then ∠H is congruent to \_\_\_\_\_\_\_\_.
2. In ΔPBL, what is the included angle for  ?
3. If quadrilateral ABCD is similar to quadrilateral EFGH,

ABCD80°FGHE80°125° then what is m∠D?1. If , find x.

R6T10QxSP141. If 5 : 8 = 10 : x, then what is the value of x?
2. Given the 2 similar quadrilaterals, find the scale factor, and then find x and z.

189xz61081. Find x and y.

9312y x81. If ΔEFD ~ ΔSTR, then ΔDEF ~ \_\_\_\_\_\_\_\_\_.
 |  **15-16: Given: AM = 3x + 2, MB = 5x – 1, and AB = 25**AMB1. Find x **and** MB.
2. AM + \_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_ is an example of the

 segment addition propertyEHGRT**17: Given: E is the midpoint of**  **EH = 5x – 24 and EG = 2x – 3**1. Find x **and** EG.

800300x01. In the figure, x = \_\_\_\_\_.

 1. The complement of an angle is five times as large as the angle. Find the degree measure of the two angles.

**20-24: Given: p: Fido is smart; q: He can jump** **Write a conditional statement for each symbolic statement.** 1. p → ~ q
2. q → ~ p
3. q → p
4. ~ p → ~ q
5. ~ q → ~ p

**40-44: Use the diagram to answer each.**11615141312101198765432dcba1. If m∠1 = 750, which angle(s) must measure 1050

for line a to be parallel to line b? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. ∠8 and ∠4 are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ angles.
2. If a || b and m∠9 = 520, then m∠14 = \_\_\_\_\_\_.
3. If c || d, m∠6 = 3x + 5 and m∠11 = 7x + 3, then x = \_\_\_\_\_
4. If m∠3 = 800, then m∠1 = \_\_\_\_\_\_\_.
5. Given: . Write an equation that is:
6. Parallel to it: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Perpendicular to it: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Given: m∠1 = 42°, find the following:

1 234 5m∠2 = \_\_\_\_\_\_\_\_.m∠3 = \_\_\_\_\_\_\_\_.m∠4 = \_\_\_\_\_\_\_\_. m∠5 = \_\_\_\_\_\_\_\_.x°x°800 4001. For the fence gate shown,

 what value of x would make the gate perpendicular  to the ground?1. Find x.

53° 27°x°1. List the angles in order from

BAC9811**SMALLEST** to **LARGEST.**1. Name one additional pair of

PTSOKM corresponding parts that  need to be congruent in  order to prove that  ΔSTP ≅ ΔMKO by **SAS.**1. If ΔWIN ≅ ΔLUV, m∠W = 38, m∠V = 102, and

 m∠I = 7x + 5, then find the value of x**65-70: Determine which postulate or theorem will prove the triangles congruent (SSS, SAS, ASA, AAS, or HL).**1. **66.**

**67. 68.**1. **70.**

AEDCB**71-74: Draw a rough sketch of each construction:**1. An angle bisector.
2. A perpendicular bisector.
3. A line perpendicular to a segment

 from a point not on the line.1. A line perpendicular to a segment

 from a point on the line.1. If ∠J∠M, then ΔJKN ~ \_\_\_\_\_\_\_\_\_. Find x.

MJ18K 1215N20xL1. Given:  Solve for x.
2. A six foot man casts a four foot shadow. At the same time, a monument casts a 24 foot shadow. How tall is

the monument?**84-90: Write what property is represented by the problem.**1. If AB = CD, then AB – 2 = CD – 2
2. If AB = CD, then AB + 10 = CD + 10
3. If 3(4x – 5), then 12x – 15
4. If a = b, then b = a
5. If a = b, and b = c, then a = c
6. DA = DA
7. If AB + CD = EF, and AB = 9, then 9 + CD = EF
 |

**If you do this exam review with all diligence, and ask questions during the next block, then you will be prepared for your exam and have a good chance of doing well on it! You can do this! ☺**