Student Name:_____

CRMS Mathematics Readiness Assessment

The goal of this assessment is to accurately measure your readiness for the math curriculum at CRMS. Students should do their own work and complete what they can in one sitting. This assessment should be taken under the supervision of a math teacher, parent, or guardian.

Please provide your solutions in the space provided.
Justify your answers using correct mathematical reasoning.
Calculators are not permitted.

The results of this test will be considered in conjunction with other factors in the determination of the awarding of the Oyster Math Scholarship.

1) Write *.3* as a fraction.

2) Write $\frac{15}{4}$ as a decimal.

3) $5 + \frac{1}{6} =$

4) $\frac{15}{8} \cdot \frac{2}{5} =$

5) $\frac{1}{2} - \frac{7}{8} =$

6) What is 15% of 20?

7) 3 -10 +4 =

8) -5 + -7 =

9) -6 - 3=

10) $(-2)^4$=

11) $5 - 3^2$=

12) 10-7(2-5) =

13) Solve for x: $x + 6 = 4$

14) Solve for x: $\frac{x}{3} = 7$

15)Solve for x: $7 = 4 - x$

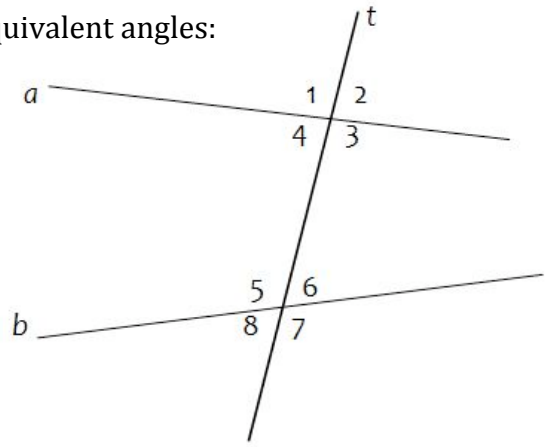
16)Solve for x: $\frac{2}{3}x + 1 = \frac{x}{6}$

17)Fred weighs 90kg but is on a diet that makes him lose .5kg per week. Joe weighs 50kg but is on a diet that makes him gain .25kg per week. After how many weeks will Fred and Joe be the same weight?

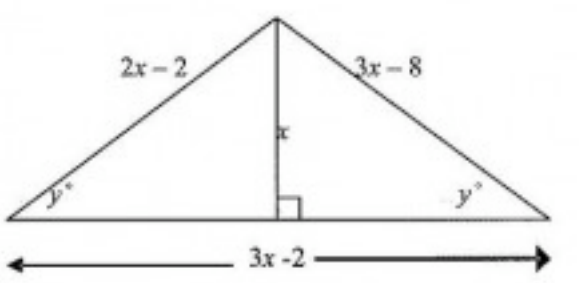
18) What is the point of intersection between the line that passes through (1,2) with a slope of -4, and the line with a y-intercept of -3 and a slope of 1?

19)Factor completely: $4x^2y + 2xy^2 - 6xy$

20)State all equivalent angles:



21)What is the area of the triangle:



22) Sketch a graph of the line: $\frac{x}{2} - 3 = y + 2x + 1$