Christ the King Diocesan High School

Algebra 2

Summer Math Packet 2024

This packet will help you review basic algebra concepts.

- Please show all your work. No work, No credit!
  (If you need more room, use loose-leaf paper to do your work and staple it to the corresponding worksheet.)
- You will be expected to do a worksheet every week.
- Do not wait to do all of the worksheets at one time.
- The COMPLETED packet is due August 16, 2024

Name_____ ID: 1
Page 1: Operations with Fractions   Date_____

Evaluate each expression.

1) $1\frac{2}{5} - \left(-3\frac{1}{2}\right)$

2) $(-1) + \frac{2}{3}$

3) $1 - 4\frac{1}{4}$

4) $\frac{2}{3} - \left(-\frac{5}{4}\right)$

Find each product.

5) $\left(\frac{1}{2}\right)\left(-\frac{17}{12}\right)$

6) $(15)\left(-\frac{3}{5}\right)$

7) $\left(-\frac{5}{3}\right)\left(-\frac{3}{2}\right)$

8) $(13)\left(-\frac{5}{3}\right)$

Find each quotient.

9) $\frac{-4}{9} \div 2$

10) $\frac{3}{5} \div \frac{-3}{14}$

11) $\frac{3}{5} \div \frac{-5}{6}$

12) $\frac{-4}{7} \div \frac{5}{14}$

Simplify each. Write your answer as a mixed number when possible.

13) $\frac{9}{54}$

14) $\frac{6}{18}$

15) $\frac{8}{12}$

16) $\frac{54}{36}$

Page 2: Two-Step/Multi-Step Equations　　　　　　　　Date_____

Solve each equation.

1) $5 + \dfrac{r}{2} = 9$

2) $-12x + 10 = 46$

3) $77 = 5n + 2$

4) $11 + \dfrac{k}{4} = 16$

5) $-7 + \dfrac{k}{5} = -10$

6) $-6 = 4a - 2a$

7) $6 = -3p + 6p$

8) $-4m - 6(m - 6) = 66$

9) $-6 - 6(5r - 4) = 198$

10) $-3(-8x + 6) = 6x - 36$
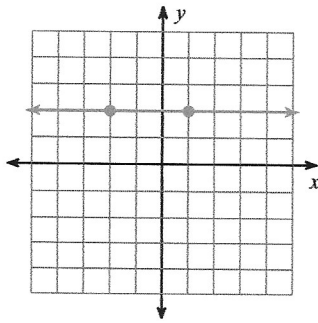
11) $-4(6a - 1) = 33 + 5a$

12) $-2(a - 7) - 5 = -3a + 10(a - 9)$

Name_____ ID: 1
Page 3: Slope of a line/Graph a line given equation
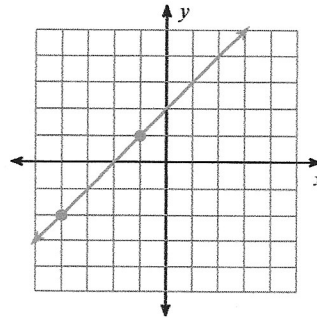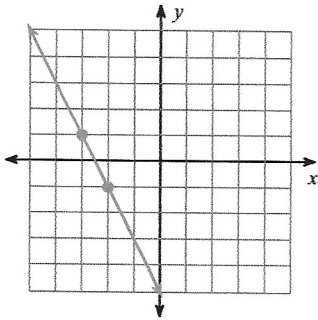Date_____

Find the slope of each line.

1)

2)

3)

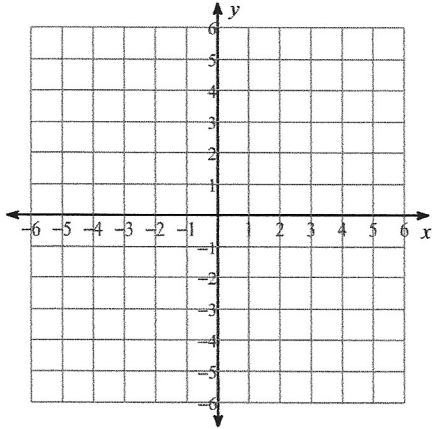**Find the slope of the line through each pair of points.**
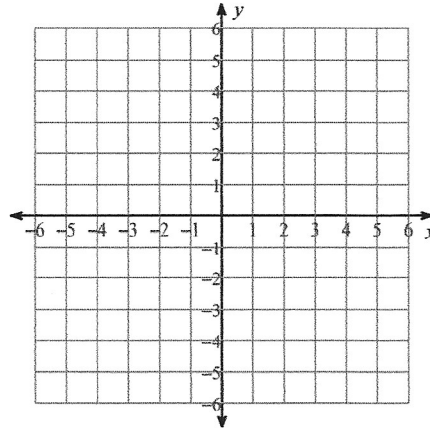
4) $(10, 12), (-17, -9)$

5) $(6, 8), (9, 1)$

6) $(-7, -20), (5, -20)$
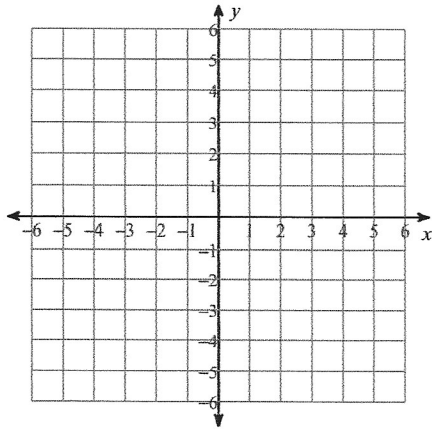
Sketch the graph of each line.

7) $y = -\dfrac{9}{5}x - 4$

8) $y = \dfrac{4}{5}x + 1$

9) $x = 5$

Page 4: Slope-Intercept/Standard Forms   Date_____

Write the slope-intercept form of the equation of each line.

1) $x - y = 4$

2) $7x - 12y = 49$

3) $x = 7$

4) $2x - y = 2$

5) $4x - y = -2$

6) $3x - 2y = -6$

7) $x = 4$

8) $4x - 5y = -15$

9) $x + 6y = -30$

10) $11x - 7y = 28$

11) $y = -4$

12) $8x - 5y = -10$