



# HOLY SPIRIT

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PREPARATORY SCHOOL

## *Rising Algebra 1*

### Summer Assignments

Academic Year – 2023-2024

#### **Course Information**

Department: STEM: Middle School Mathematics

Class Description: Algebra 1

Contact: Mrs. Turmel [sturmel@holyspiritprep.org](mailto:sturmel@holyspiritprep.org) for any questions

#### **Summer Assignment**

##### Learning objectives

- Practice integer, fraction and decimal skills with addition, subtraction, multiplication, and division.
- Utilize slope-intercept form.
- Solve two step equations.

##### Estimate time of completion

2-3 hours

##### Details of Assignment

1. Complete the attached problem set. NO CALCULATOR may be used. Please attach work shown with each problem neatly labeled. Write your final answer to each problem on the summer work sheet, next to the problem itself.

## Rising Algebra 1

Date \_\_\_\_\_ Period \_\_\_\_\_

**Evaluate each expression.**

1)  $6 - 4$

2)  $3 - (-1)$

3)  $1 - 1$

4)  $(-4) - (-8)$

**Find each product.**

5)  $-2 \times 9$

6)  $-10 \times 8$

7)  $-2 \times 3$

8)  $10 \times -1$

**Find each quotient.**

9)  $7 \div -7$

10)  $-14 \div 2$

11)  $15 \div -5$

12)  $-32 \div 8$

**Evaluate each expression.**

13)  $5 + 2 - 3$

14)  $4 + 6 \div 2$

15)  $5 + 3 \times 5$

16)  $(2 - 1)^2$

17)  $6 + 3 + 6$

18)  $1 + 6 - 2$

**Simplify each expression.**

19)  $10 - 5k - 9k + 2$

20)  $3x - 4 + 5x$

21)  $9(6 - 6m)$

22)  $9(1 + k)$

23)  $9(9 + 5v) - 4v$

24)  $4(9 - 2n) + 2n$

**Solve each equation.**

25)  $7 = \frac{n + 10}{3}$

26)  $-9 + \frac{x}{2} = -14$

27)  $5 + 7b = -2$

28)  $77 = -5m - 8$

29)  $4 + 5r = 19$

30)  $2 = 2 - 7n$

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

31)  $1\frac{4}{12}$

32)  $\frac{36}{30}$

33)  $5\frac{12}{30}$

34)  $3\frac{12}{84}$

**Evaluate each expression.**

35)  $-\frac{11}{7} - \frac{5}{4}$

36)  $-\frac{1}{6} - \frac{3}{4}$

37)  $\frac{9}{5} - \frac{7}{5}$

38)  $\frac{3}{8} + \frac{13}{8}$

39)  $(-8) - \left(-1\frac{1}{2}\right)$

40)  $3\frac{3}{8} + 2\frac{3}{8}$

**Find each product.**

41)  $-2 \times \frac{3}{2}$

42)  $\frac{4}{5} \times -\frac{3}{2}$

43)  $-2\frac{4}{5} \times 5\frac{3}{10}$

44)  $5\frac{1}{10} \times \frac{1}{5}$

**Find each quotient.**

45)  $\frac{9}{10} \div \frac{17}{10}$

46)  $\frac{-1}{7} \div \frac{1}{5}$

**Write each as a numeral.**

47) four hundred and eighty-one hundredths

48) seven hundred and two hundredths

49) three hundred and four tenths

50) eight hundred and six tenths

**Round each to the place indicated.**

51) 8.02; tenths

52) 6.71; tenths

53) 32,259,748.6; ten thousands

54) 7,730,806; millions

**Evaluate each expression.**

55)  $3.6 - 3.2$

56)  $(-6.15) - (-4.3)$

57)  $1.2 + (-2.5)$

58)  $6.7 + 6.4$

**Find each product.**

59)  $-6.6 \times 1.9$

60)  $0.8 \times 9.4$

61)  $-4.7 \times 7.36$

62)  $2.5 \times 0.2$

**Find each quotient.**

63)  $0.6 \div -0.8$

64)  $4.3 \div 4.3$

**Write each as a decimal. Round to the hundredths place.**

65) 11%

66) 7%

**Find the LCM of each.**

67) 21, 24

68) 20, 30

69) 33, 17

70) 21, 35

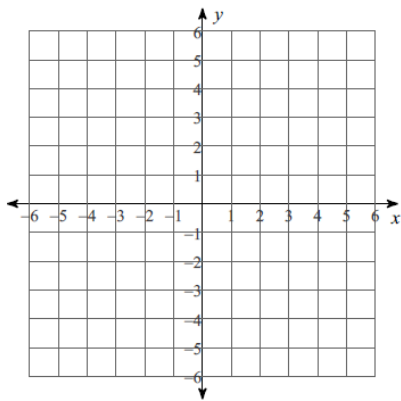
**Find the GCF of each.**

71) 24, 36

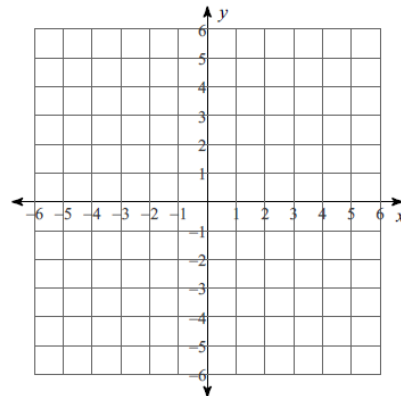
72) 44, 20

**Sketch the graph of each line.**

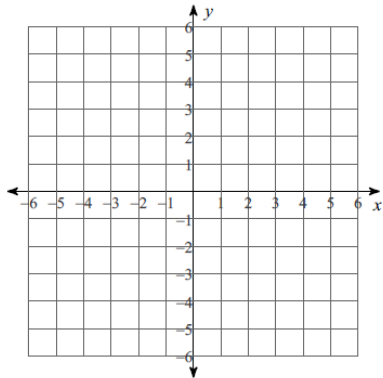
73)  $y = x$



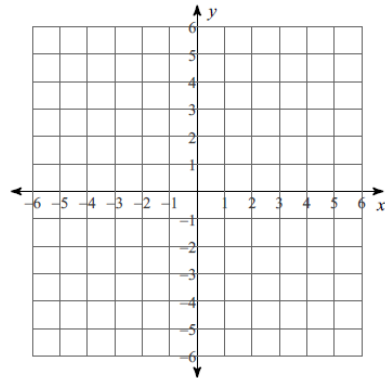
74)  $y = \frac{1}{4}x + 2$



75)  $y = -\frac{3}{2}x + 4$

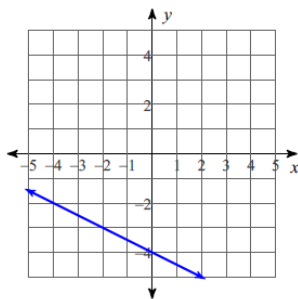


76)  $y = \frac{9}{5}x + 5$

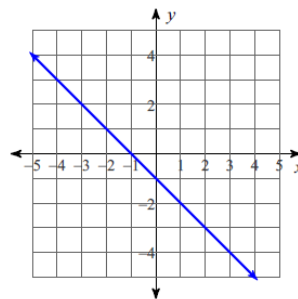


Write the slope-intercept form of the equation of each line.

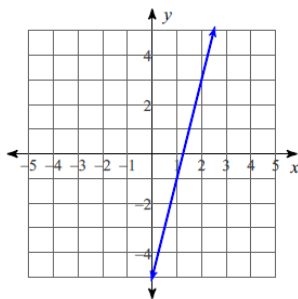
77)



78)



79)



80)

