

Honors Algebra 1 Summer Problem Set

Date _____ Period _____

Solve each equation. Show your work.

1) $7 = -7k$

2) $x + 12 = -7$

3) $-9n = -180$

4) $21 = 6 + b$

5) $k - 6 = -16$

6) $\frac{v}{15} = 4$

7) $3 = 2 + a$

8) $12 = 16 - k$

9) $-3 - 10b = -53$

10) $270 = -10(-10 + b)$

11) $-15 = \frac{n}{-2} - 8$

12) $1 = \frac{6 + n}{21}$

$$13) -92 = 10 + 6v$$

$$14) -10k + 10 = -80$$

$$15) 5k - 10 = 90$$

$$16) -27 = 9(-1 + p)$$

$$17) 1 + 2a = 6 - 6a + 3a$$

$$18) 5n + 3 = -9 + 2n + 7n$$

$$19) -2(7 - 7k) + 8k = 40 + 4k$$

$$20) 8m - 3(-1 - 2m) = 8m - 33$$

$$21) 2 - 6(8 - 5x) = -x + 16$$

$$22) 4(4x - 6) = 6x + 16$$

$$23) 7(1 + 5x) + 8(x - 7) = -8x + 2x$$

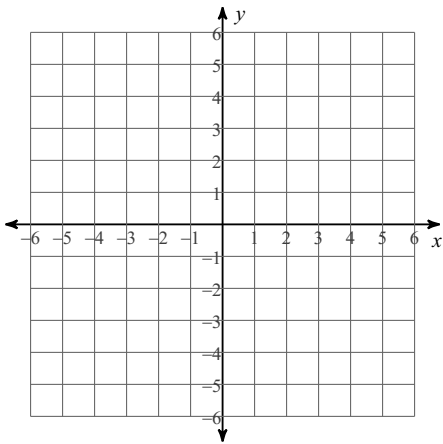
$$24) -(1 - 8p) - (5p + 1) = -2 + p - 2$$

$$25) -5m - (4 + 6m) = -7m - 3(2m + 6)$$

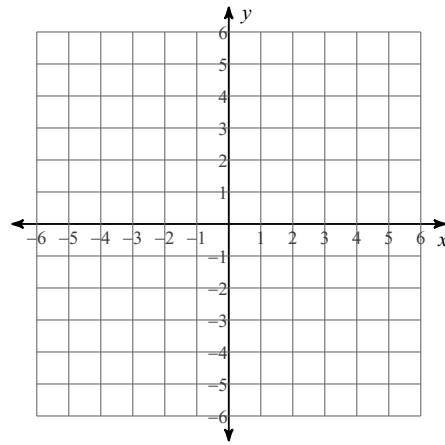
$$26) -7(r + 1) = -3(7r - 7)$$

Sketch the graph of each line.

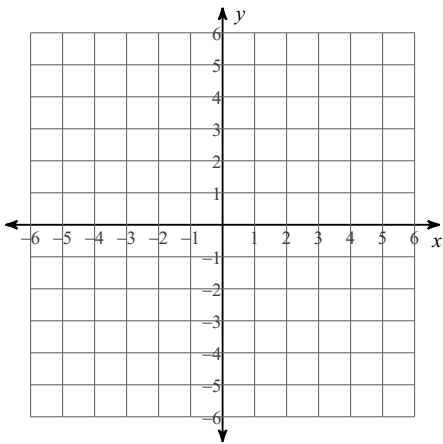
27) $y = -4x$



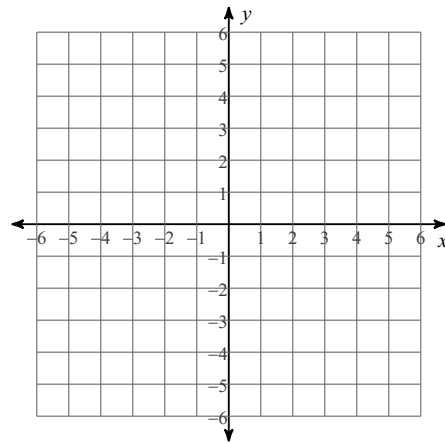
28) $y = \frac{2}{5}x - 2$



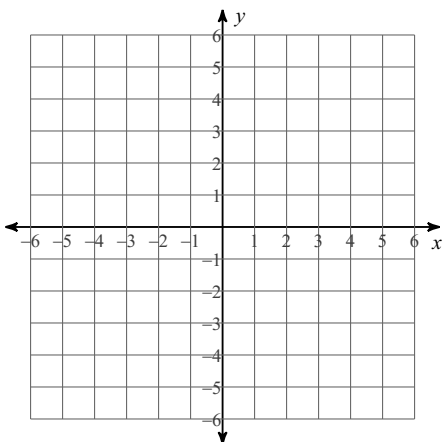
29) $y = \frac{3}{2}x - 1$



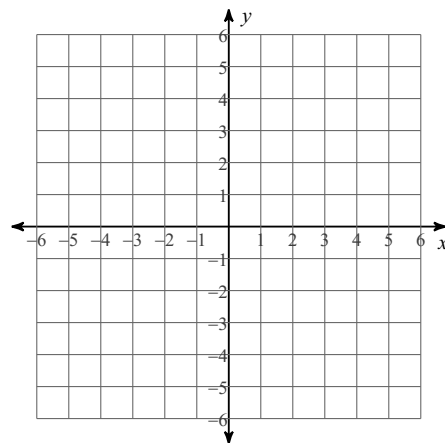
30) $y = 2x - 2$



31) $y = x + 2$



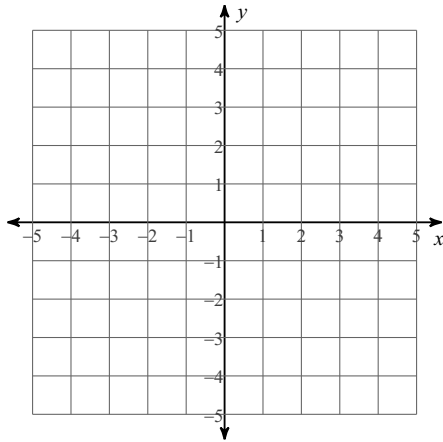
32) $y = \frac{1}{3}x + 1$



Solve each system by graphing. After graphing, write the solution below the graph.

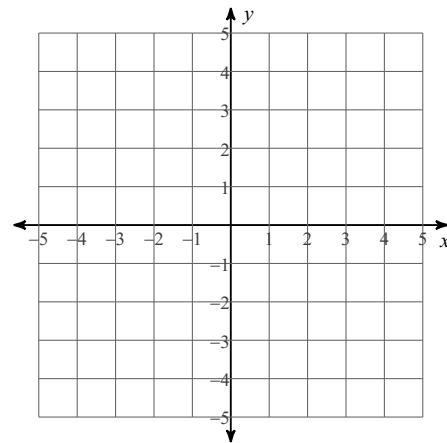
33) $y = -\frac{1}{4}x + 1$

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



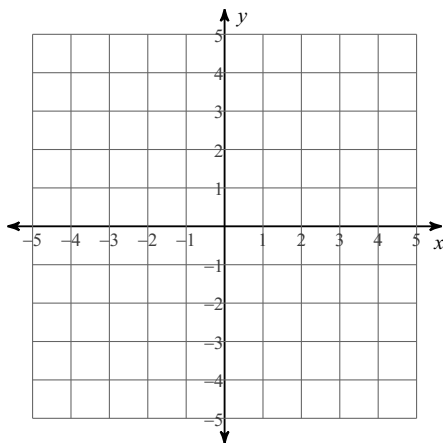
34) $y = \frac{1}{3}x + 4$

$y = -2x - 3$



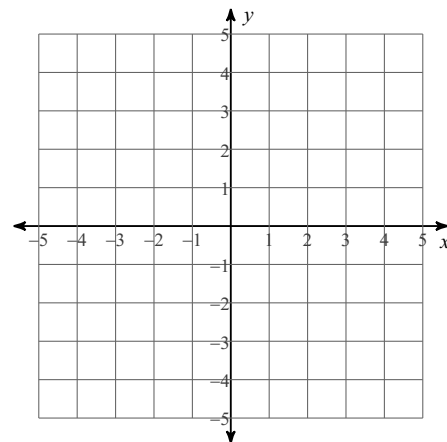
35) $y = -x + 4$

$y = \frac{1}{2}x + 1$



36) $y = -6x - 2$

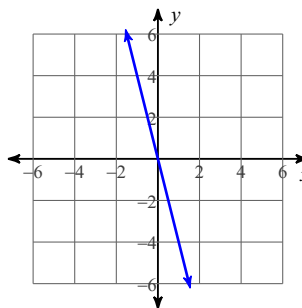
$y = -x + 3$



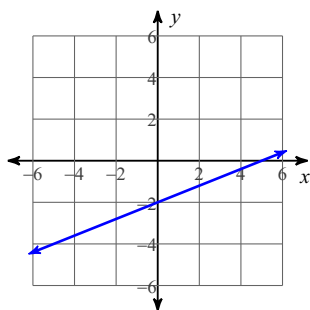
37) List the prime numbers between 0 and 100.

Answers to Honors Algebra 1 Summer Problem Set (ID: 1)

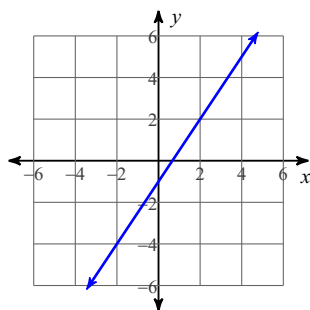
- | | | | |
|---------------|---------------|--------------|--------------|
| 1) $\{-1\}$ | 2) $\{-19\}$ | 3) $\{20\}$ | 4) $\{15\}$ |
| 5) $\{-10\}$ | 6) $\{60\}$ | 7) $\{1\}$ | 8) $\{4\}$ |
| 9) $\{5\}$ | 10) $\{-17\}$ | 11) $\{14\}$ | 12) $\{15\}$ |
| 13) $\{-17\}$ | 14) $\{9\}$ | 15) $\{20\}$ | 16) $\{-2\}$ |
| 17) $\{1\}$ | 18) $\{3\}$ | 19) $\{3\}$ | 20) $\{-6\}$ |
| 21) $\{2\}$ | 22) $\{4\}$ | 23) $\{1\}$ | 24) $\{-1\}$ |
| 25) $\{-7\}$ | 26) $\{2\}$ | 27) | |



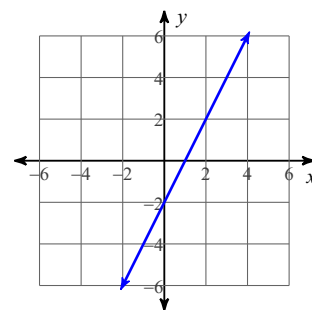
28)



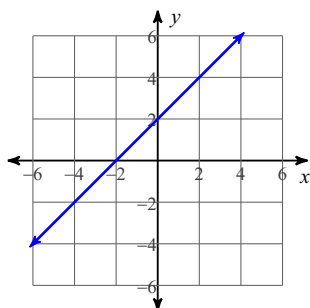
29)



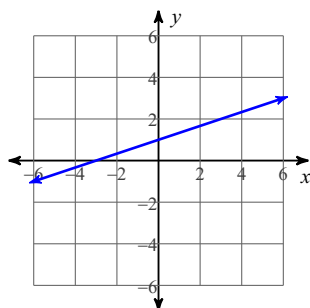
30)



31)



32)



33) $(-4, 2)$

34) $(-3, 3)$

35) $(2, 2)$

36) $(-1, 4)$

37) 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89