

Summer Assessment **Review**

Date _____ Period _____

Evaluate each expression.

1) $2 + 2 \times 5$

- A) 7 B) 12
C) 11 D) 14

2) $5 + 16 \div (2 + 2)$

- A) 9 B) 13
C) 6 D) 14

3) $2 \div (6 - 4) + 4 + 3$

- A) 6 B) 8
C) 4 D) 3

Simplify each expression.

4) $-2x - 8x$

- A) $1 + 6x$ B) $-10x$
C) $1 - 3x$ D) $1 - 4x$

5) $-4(7 - 5p)$

- A) $-28 + 27p$ B) $-36 + 27p$
C) $-28 + 20p$ D) $-26 + 27p$

6) $-r - 7(r - 4)$

- A) $50 - 35r$ B) $-4 + 35r$
C) $-8r + 31$ D) $-8r + 28$

Solve each equation.

7) $-6(x - 8) = 84$

A) $\{-6\}$

B) $\{14\}$

C) $\{6\}$

D) No solution.

8) $-88 = -8(1 + 2r)$

A) $\{-1\}$

B) $\{1\}$

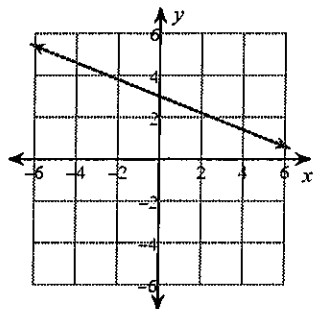
C) $\{5\}$

D) $\{-5\}$

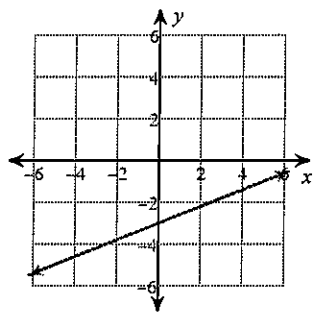
Sketch the graph of each line.

9) $2x - 5y = 15$

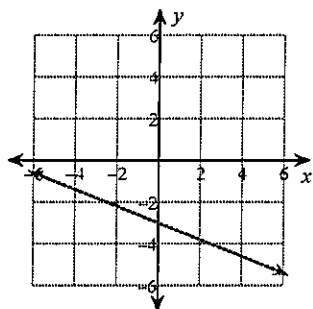
A)



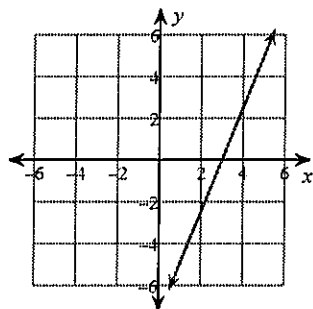
B)



C)

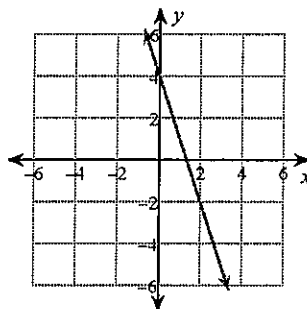


D)

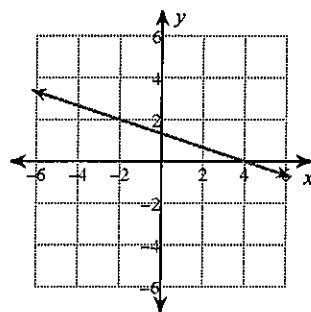


10) $y = -3x + 4$

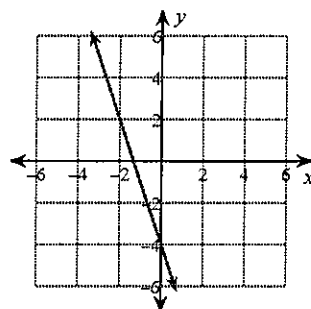
A)



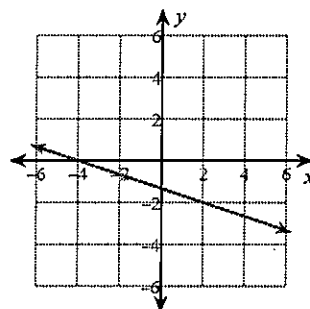
B)



C)



D)



Solve each system by graphing, substitution, or elimination (your choice).

$$11) \ y = -\frac{1}{3}x - 1$$
$$y = \frac{1}{3}x - 3$$

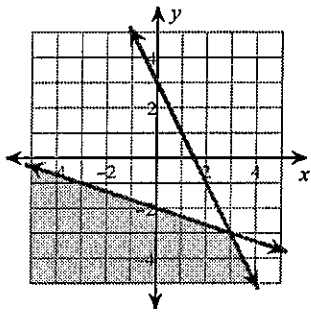
$$12) \ -7x + y = 19$$
$$4x + 2y = -16$$

$$13) \ 8x - 9y = 23$$
$$16x - 8y = -24$$

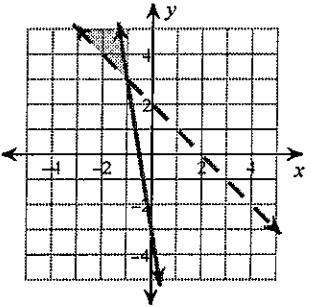
Sketch the solution to each system of inequalities.

14) $y > -x + 2$
 $y \leq -6x - 3$

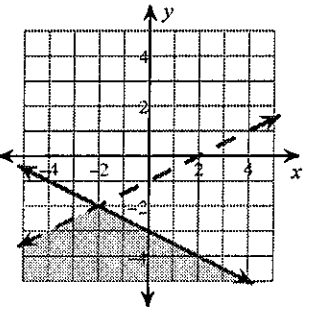
A)



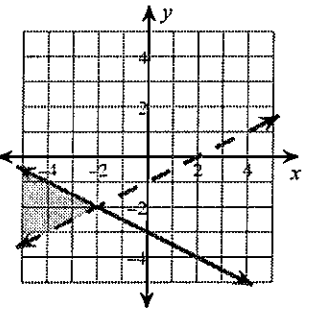
B)



C)

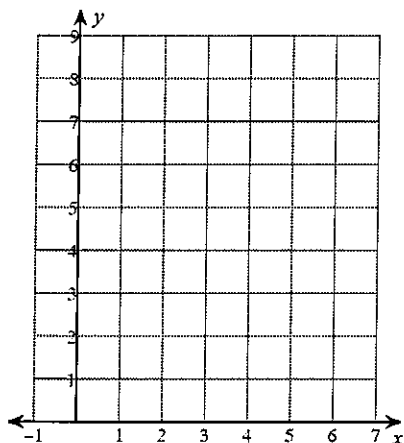


D)



Given the graph, please list the axis of symmetry and the vertex.

15) $y = (x - 1)^2 + 4$

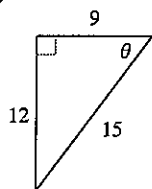


Given the quadratic equation, please list the axis of symmetry, the vertex, and address whether the parabola opens up or down.

16) $y = 3(x - 1)^2 + 2$

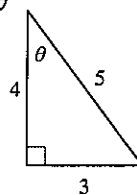
Find the value of the trig function indicated. Remember to simplify your fractions (put them in lowest terms!)

17) $\cos \theta$



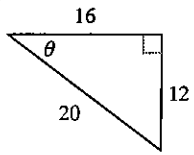
- A) $\frac{5}{4}$ B) $\frac{4}{5}$
C) $\frac{3}{5}$ D) $\frac{4}{3}$

18) $\tan \theta$



- A) $\frac{3}{4}$ B) $\frac{3}{5}$
C) $\frac{4}{3}$ D) $\frac{5}{3}$

19) $\tan \theta$



A) $\frac{24}{25}$

B) $\frac{3}{4}$

C) $\frac{5}{4}$

D) $\frac{4}{5}$

20) What is the value of the complex number i ?