

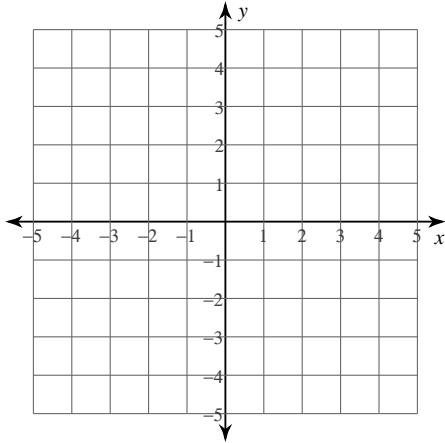
Algebra 1

7.6 Extra Practice - Solve Systems of Inequalities

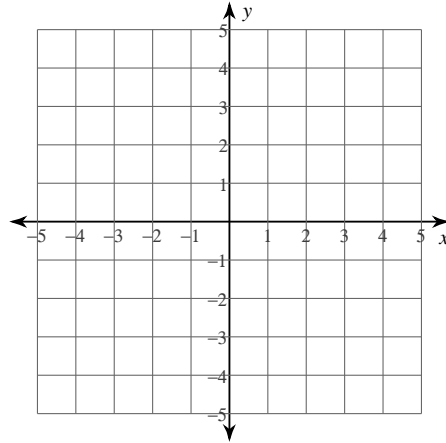
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Sketch the solution to each system of inequalities.

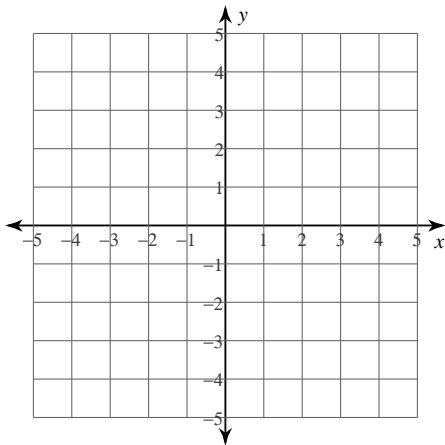
$$1) \begin{aligned} y &< -x + 2 \\ y &< -6x - 3 \end{aligned}$$



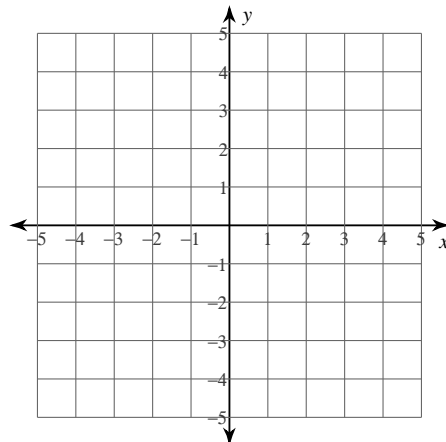
$$2) \begin{aligned} y &\leq -x + 2 \\ y &< -6x - 3 \end{aligned}$$



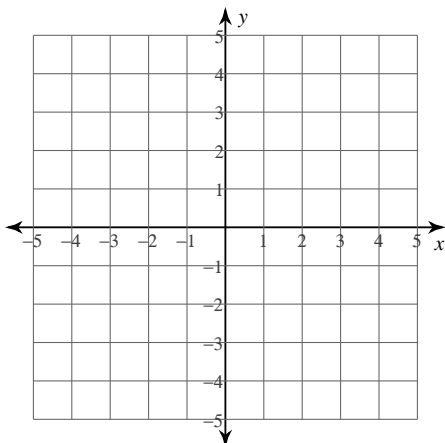
$$3) \begin{aligned} y &\leq x - 2 \\ y &> -4x + 3 \end{aligned}$$



$$4) \begin{aligned} y &< -\frac{1}{3}x + 1 \\ y &< \frac{1}{3}x + 3 \end{aligned}$$

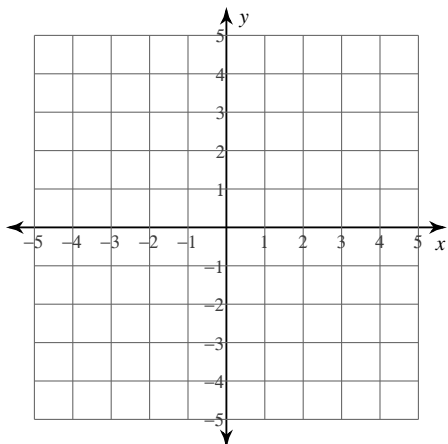


$$5) \begin{aligned} y &> -2x + 3 \\ y &\leq \frac{1}{2}x - 2 \end{aligned}$$



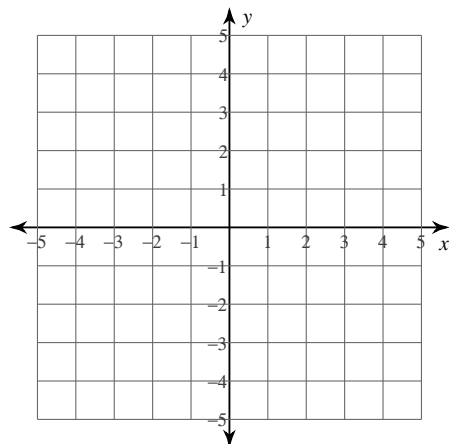
$$6) y > -\frac{1}{3}x + 1$$

$$y \leq \frac{1}{3}x + 3$$



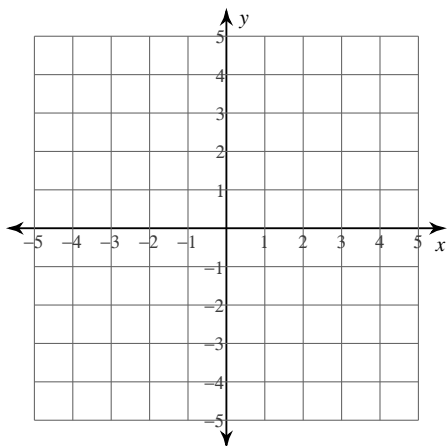
$$7) y \geq -\frac{1}{2}x - 3$$

$$y \geq \frac{5}{2}x + 3$$



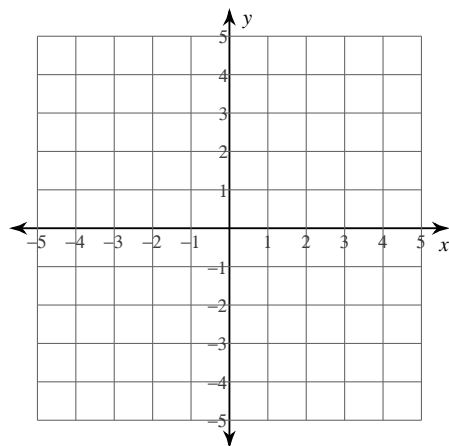
$$8) y < -5x - 2$$

$$y \leq -x + 2$$



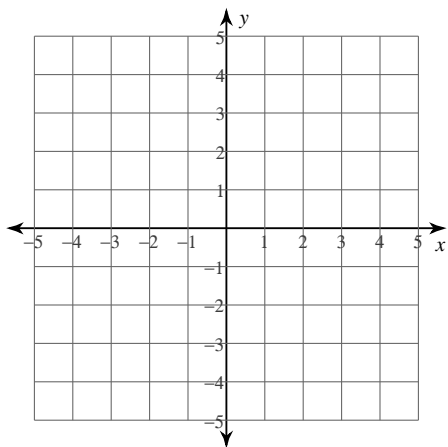
$$9) y > 3$$

$$y \leq x + 1$$



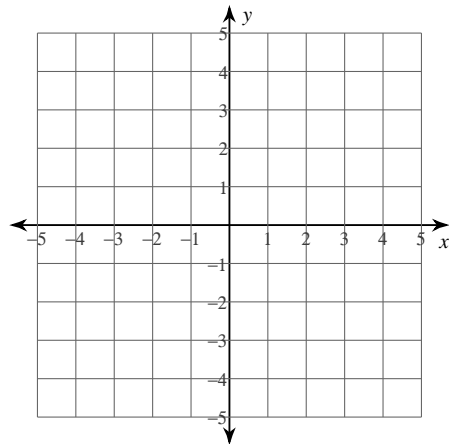
$$10) y > 2x + 3$$

$$y < -\frac{1}{2}x - 2$$

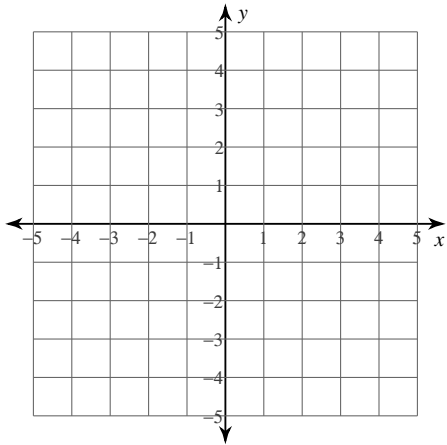


$$11) x - 3y < -6$$

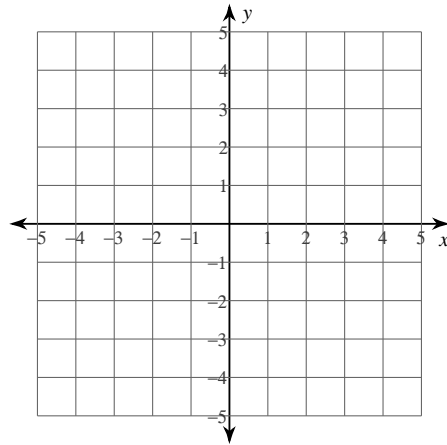
$$5x - 3y \leq 6$$



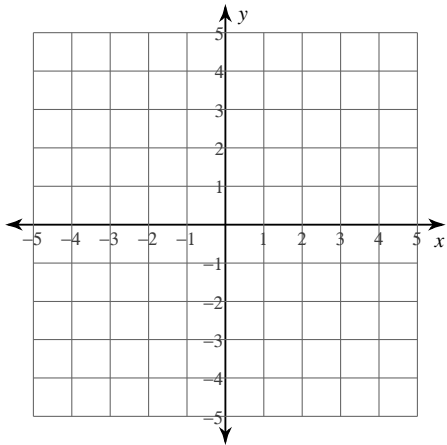
12) $2x + 3y < 9$
 $4x - 3y \geq 9$



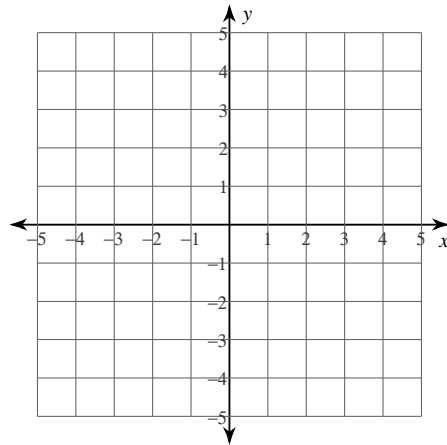
13) $4x - y \geq -3$
 $2x + y > -3$



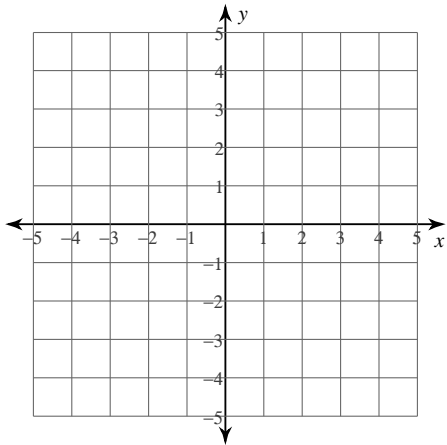
14) $x + y > -3$
 $3x - y \leq -1$



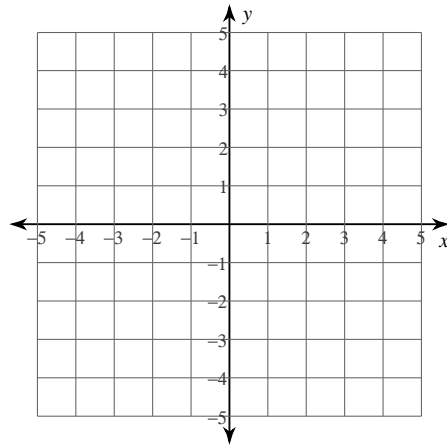
15) $x - 2y > -2$
 $3x - 2y < 2$



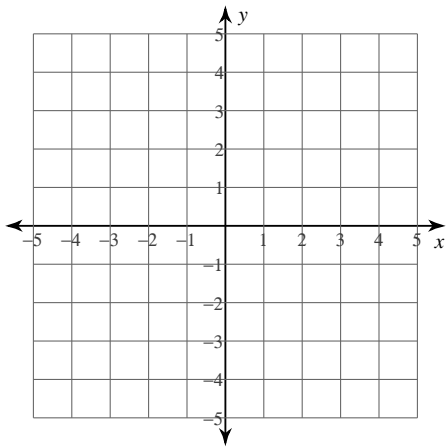
16) $x > 2$
 $3x - 2y \geq 4$



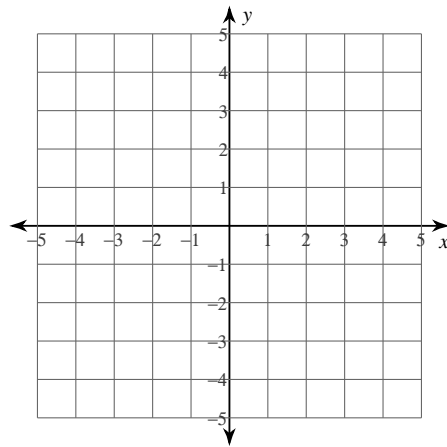
17) $3x - y < -3$
 $x - 2y \geq 4$



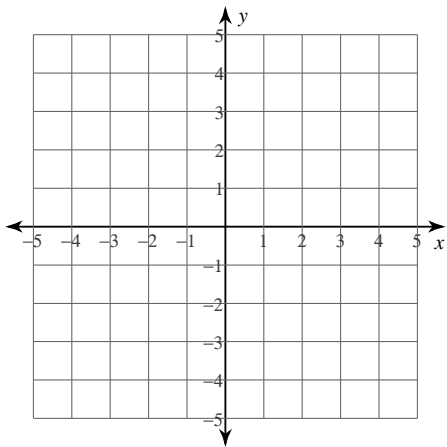
18) $x > 2$
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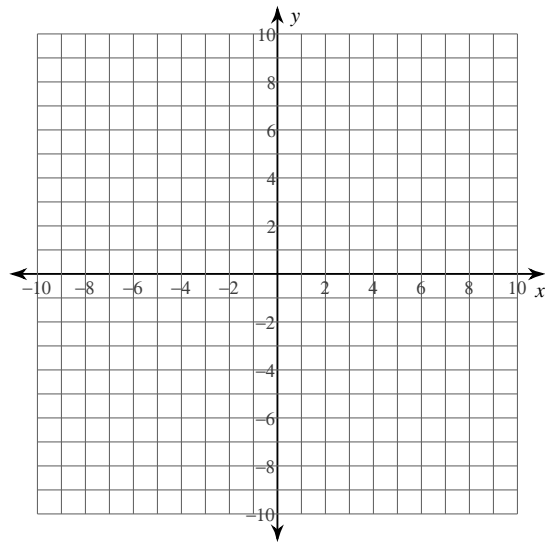
19) $2x - y \geq -3$
 $x - 3y < 6$



20) $2x + y > -3$
 $x + 3y > 6$

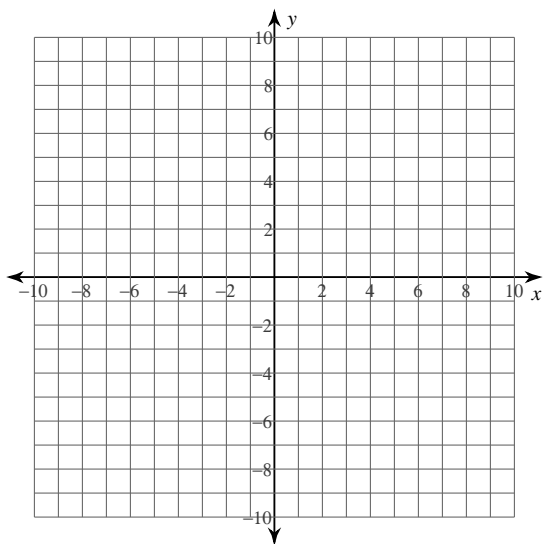


21) $y > \frac{1}{5}x - 5$
 $y < -\frac{8}{5}x + 4$



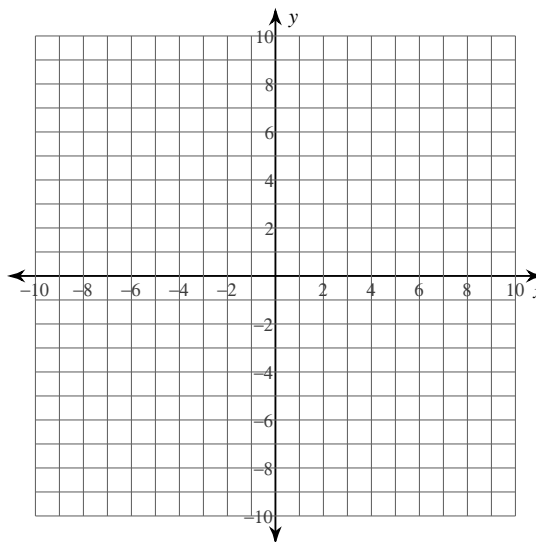
$$22) y \leq -\frac{10}{3}x - 4$$

$$y \geq \frac{1}{3}x + 7$$



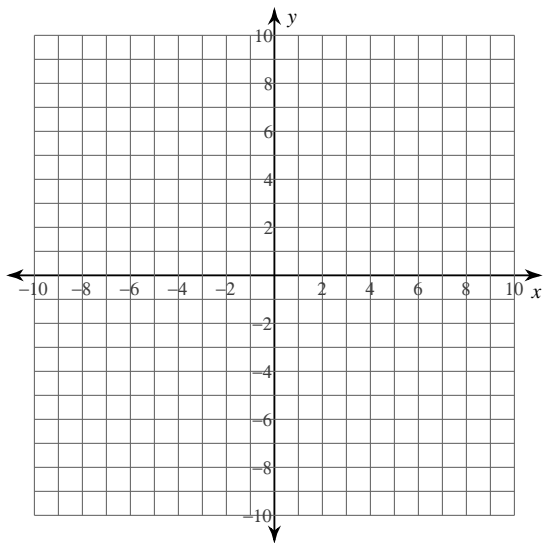
$$23) y \leq x - 2$$

$$y < -\frac{2}{5}x + 5$$



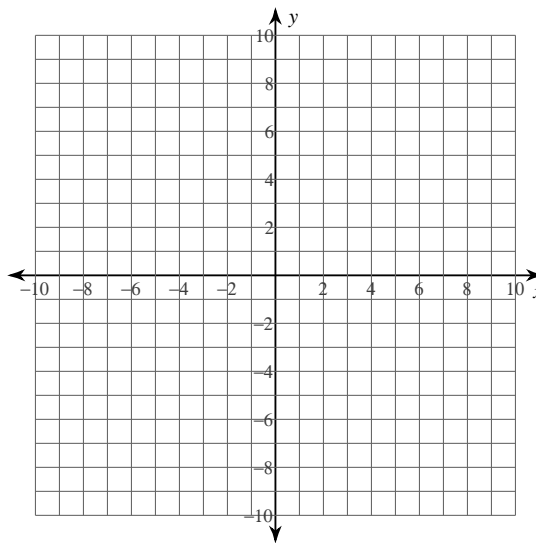
$$24) y \leq -\frac{5}{3}x - 6$$

$$y > 2x + 5$$



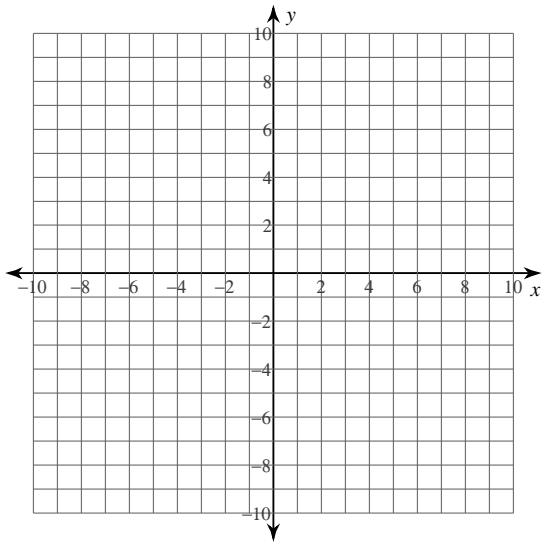
$$25) x < -8$$

$$y < -\frac{1}{8}x - 6$$



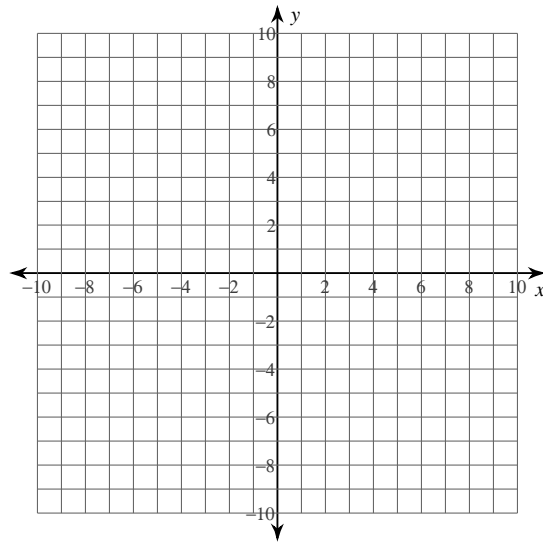
$$26) y > \frac{1}{2}x + 6$$

$$y \leq -\frac{3}{4}x - 4$$



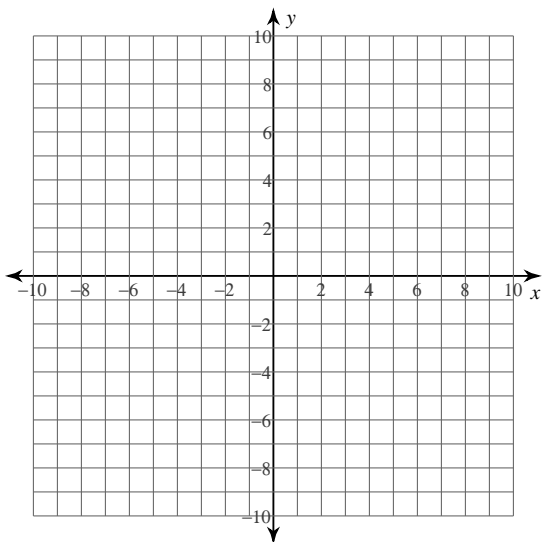
$$27) y \leq \frac{2}{7}x + 8$$

$$y \leq -\frac{4}{7}x + 2$$



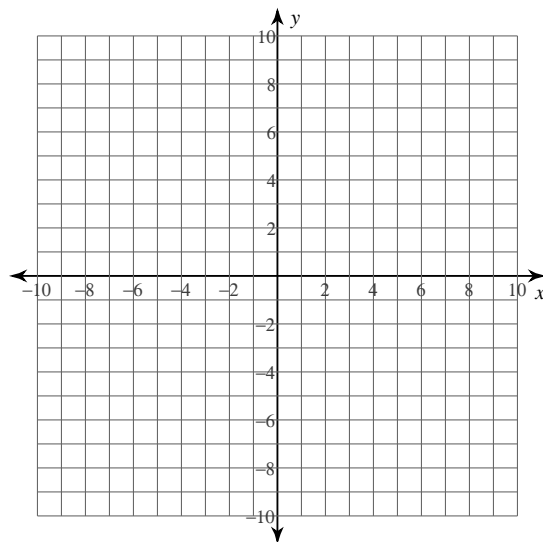
$$28) y < x - 8$$

$$y < -14x + 7$$

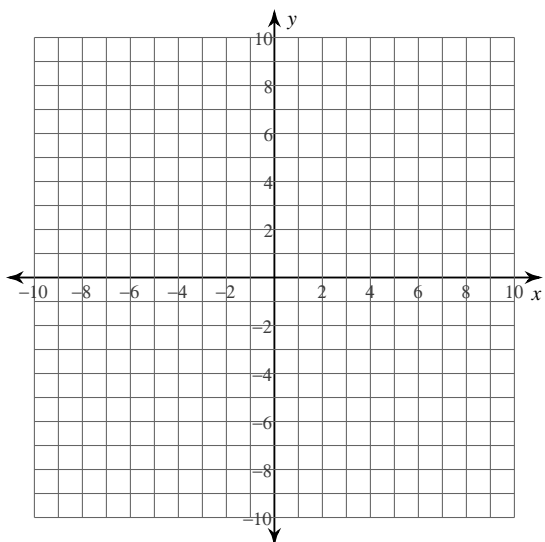


$$29) y < -1$$

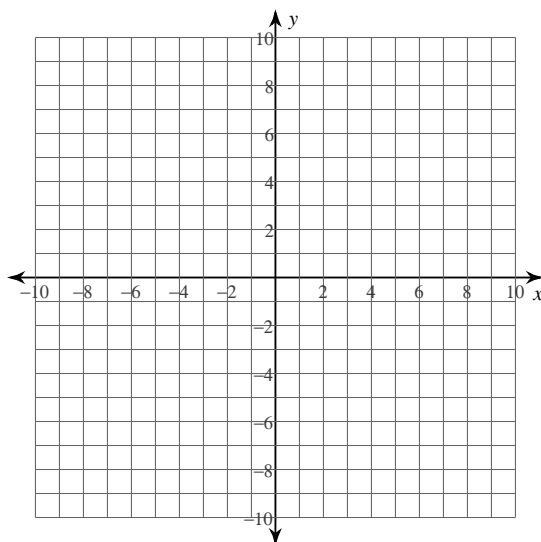
$$y < -6x + 5$$



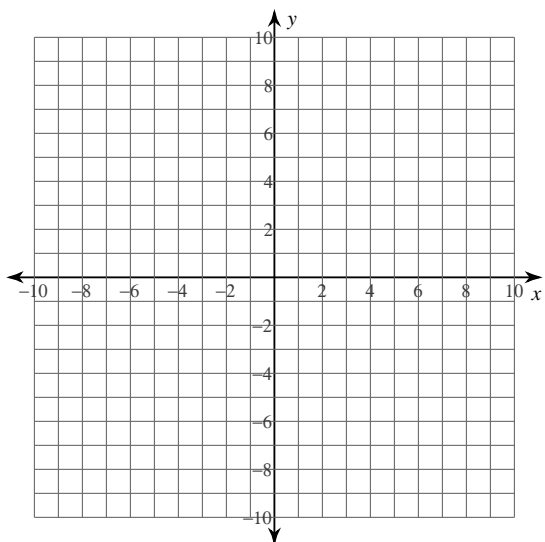
30) $y \leq -8$
 $y \geq -2x + 2$



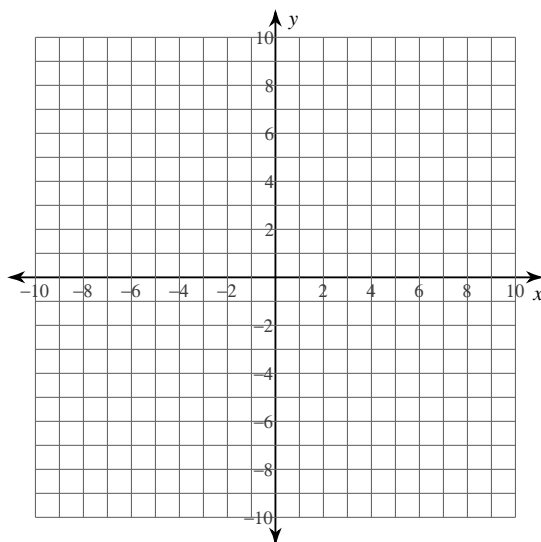
31) $16x - 5y \leq 40$
 $3x - 5y \leq -25$



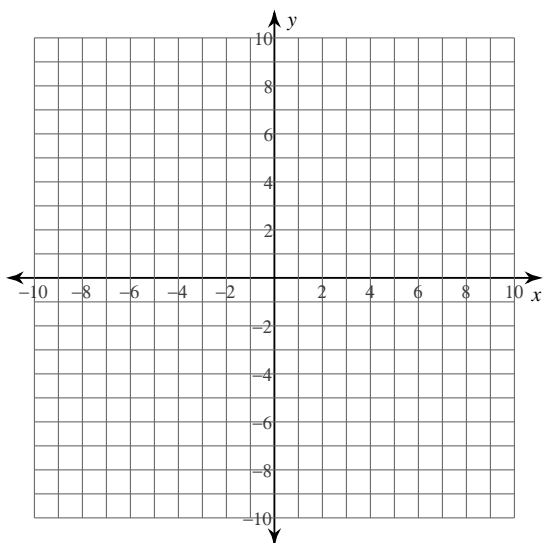
32) $3x - 5y \leq 30$
 $8x + 5y \leq 25$



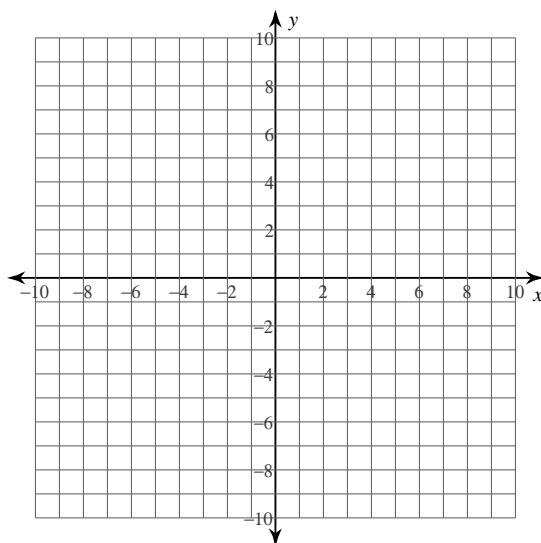
33) $4x - 5y \geq 15$
 $6x + 5y \leq 35$



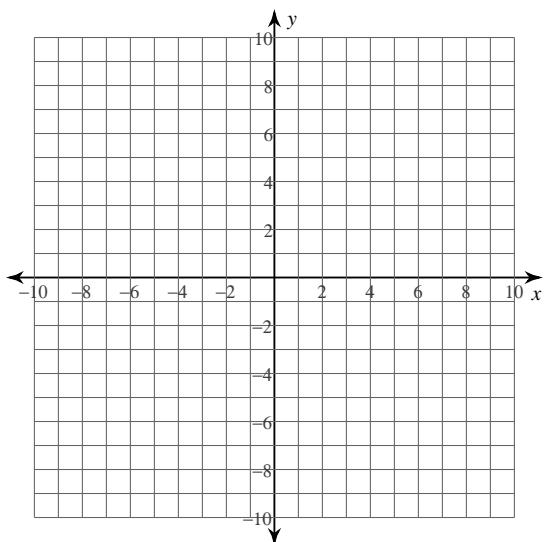
34) $3x - y > 5$
 $y > -2$



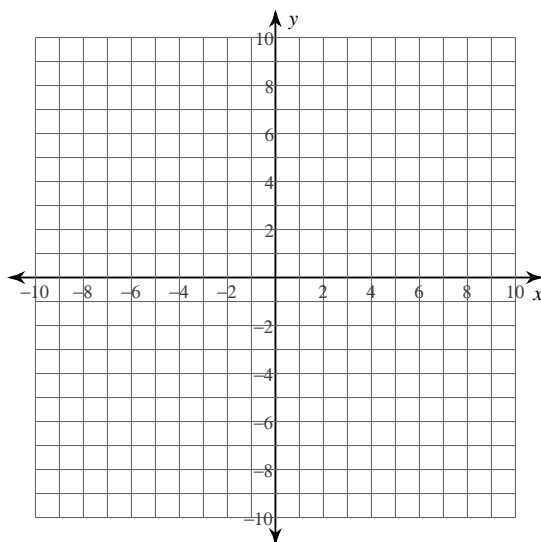
35) $11x - y \leq 7$
 $x + y > 5$



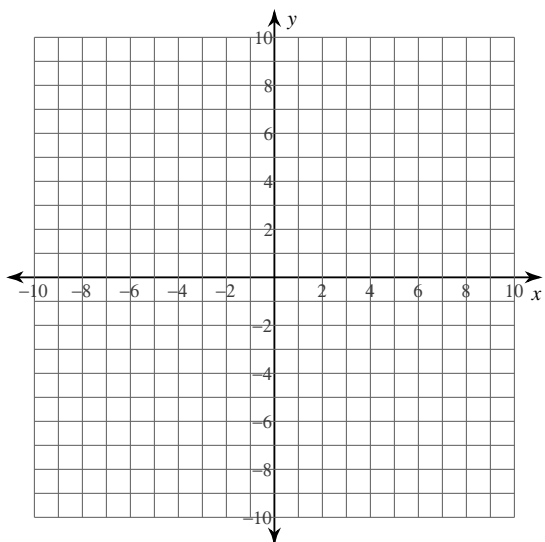
36) $x - 8y > 40$
 $x - y > -2$



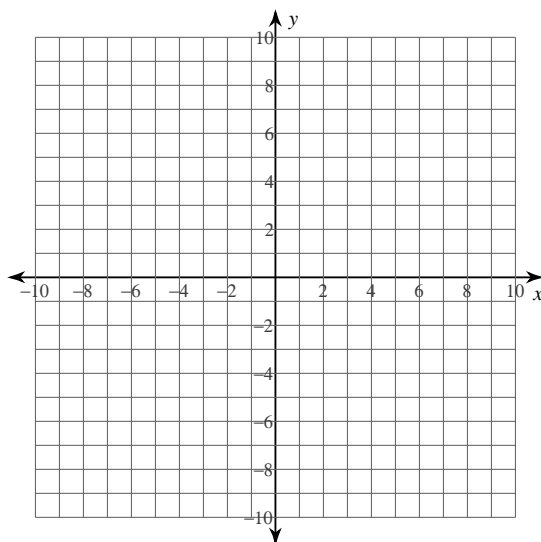
37) $x - y \leq -7$
 $4x - y \leq -4$



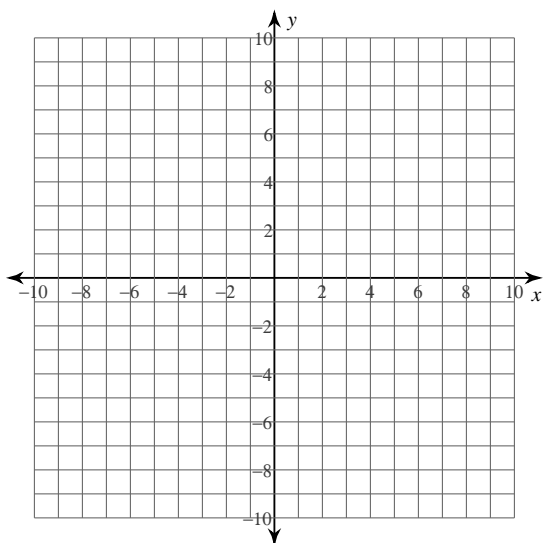
38) $x - y < -8$
 $3x + y \leq -4$



39) $3x + 4y \leq -32$
 $x \leq -4$



40) $3x + 2y \leq 2$
 $x + 3y > -18$



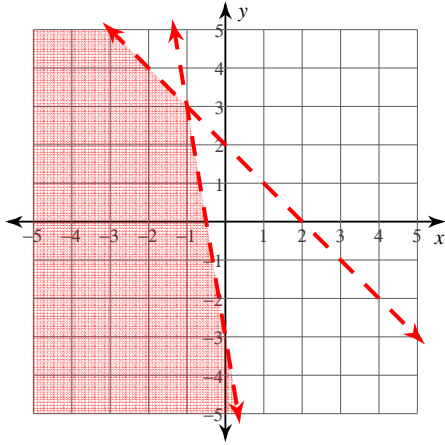
Algebra 1

7.6 Extra Practice - Solve Systems of Inequalities

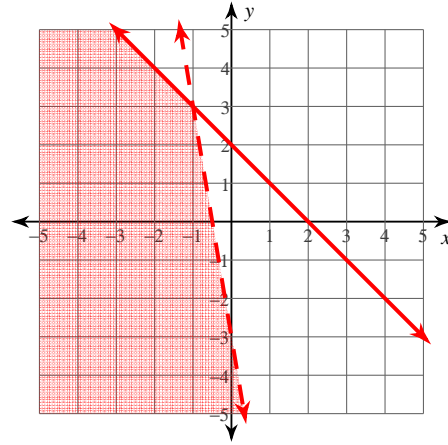
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Sketch the solution to each system of inequalities.

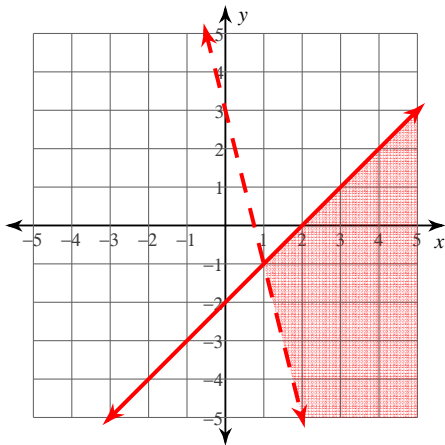
$$1) \begin{aligned} y &< -x + 2 \\ y &< -6x - 3 \end{aligned}$$



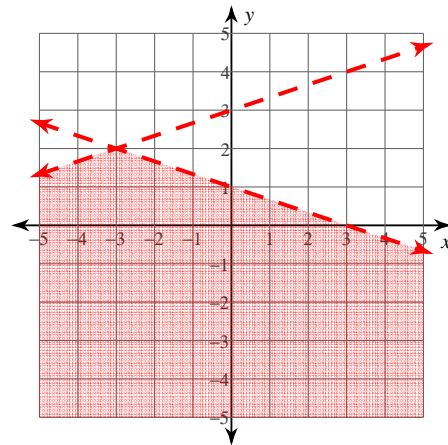
$$2) \begin{aligned} y &\leq -x + 2 \\ y &< -6x - 3 \end{aligned}$$



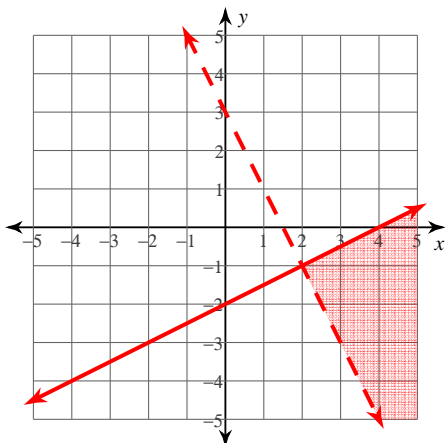
$$3) \begin{aligned} y &\leq x - 2 \\ y &> -4x + 3 \end{aligned}$$



$$4) \begin{aligned} y &< -\frac{1}{3}x + 1 \\ y &< \frac{1}{3}x + 3 \end{aligned}$$

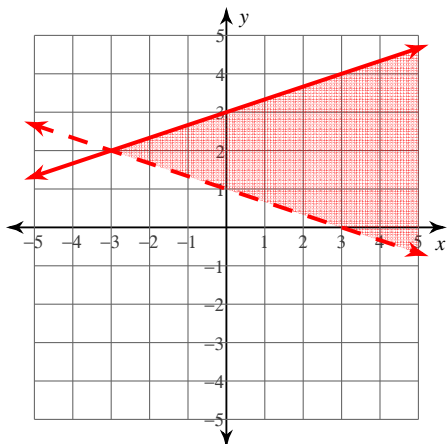


$$5) \begin{aligned} y &> -2x + 3 \\ y &\leq \frac{1}{2}x - 2 \end{aligned}$$



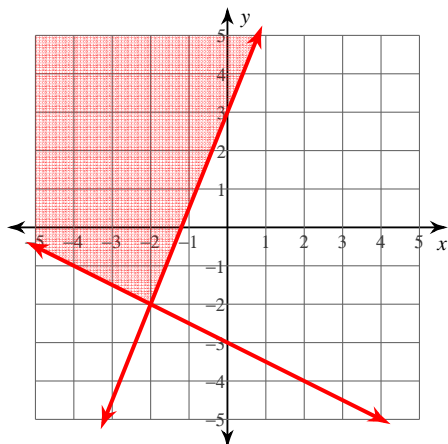
$$6) y > -\frac{1}{3}x + 1$$

$$y \leq \frac{1}{3}x + 3$$



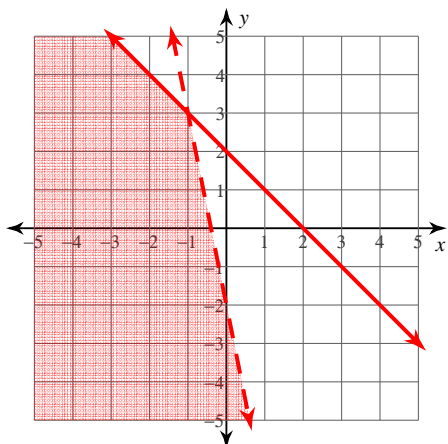
$$7) y \geq -\frac{1}{2}x - 3$$

$$y \geq \frac{5}{2}x + 3$$



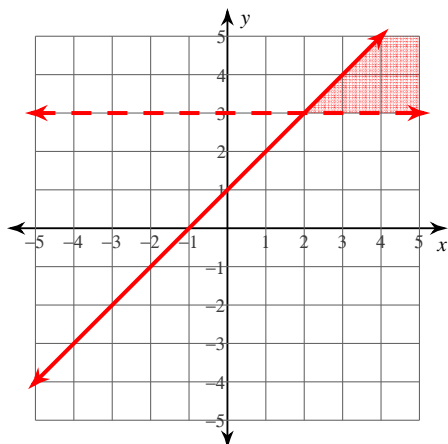
$$8) y < -5x - 2$$

$$y \leq -x + 2$$



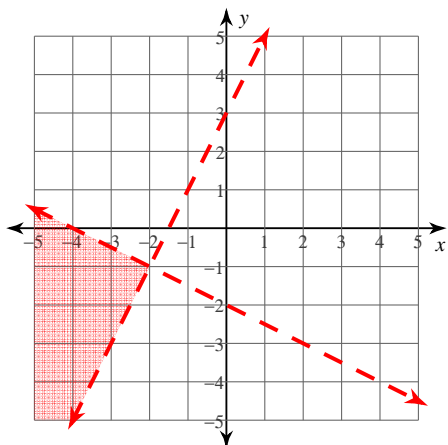
$$9) y > 3$$

$$y \leq x + 1$$



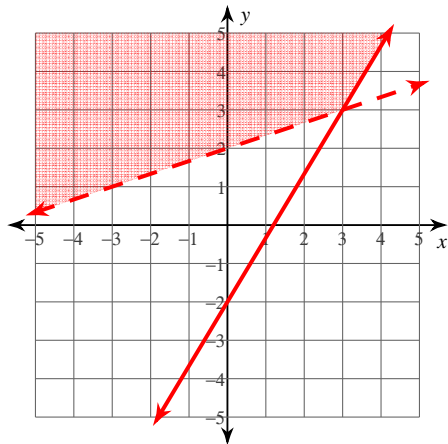
$$10) y > 2x + 3$$

$$y < -\frac{1}{2}x - 2$$

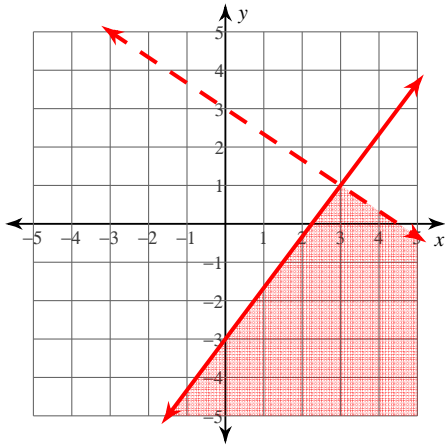


$$11) x - 3y < -6$$

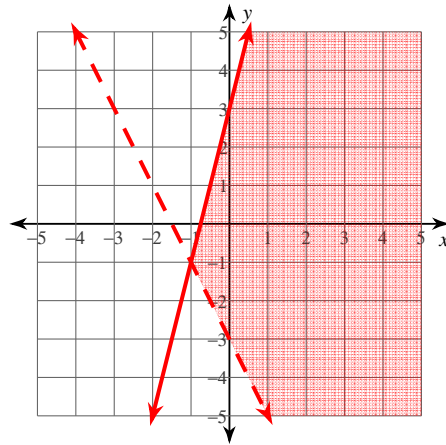
$$5x - 3y \leq 6$$



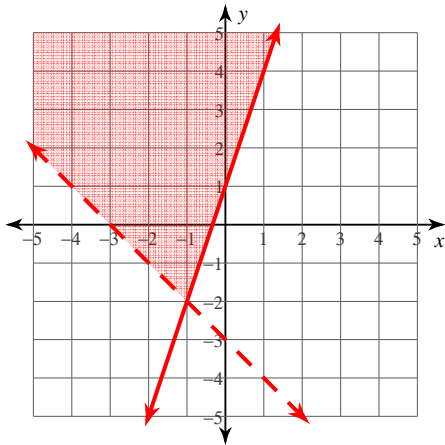
12) $2x + 3y < 9$
 $4x - 3y \geq 9$



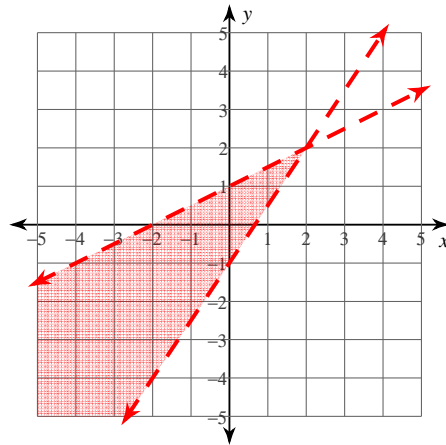
13) $4x - y \geq -3$
 $2x + y > -3$



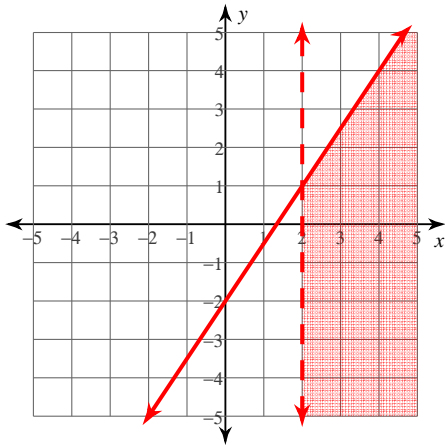
14) $x + y > -3$
 $3x - y \leq -1$



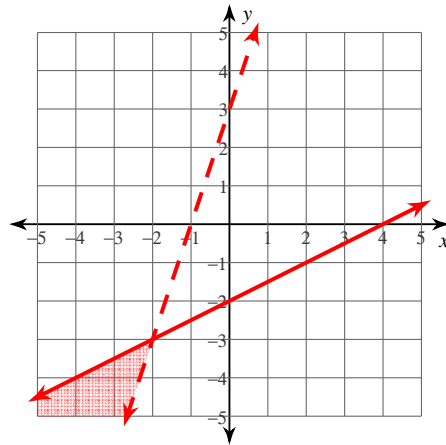
15) $x - 2y > -2$
 $3x - 2y < 2$



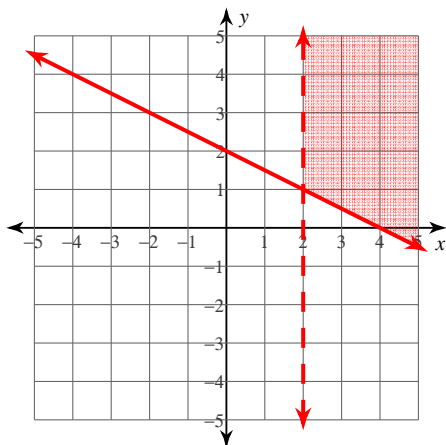
16) $x > 2$
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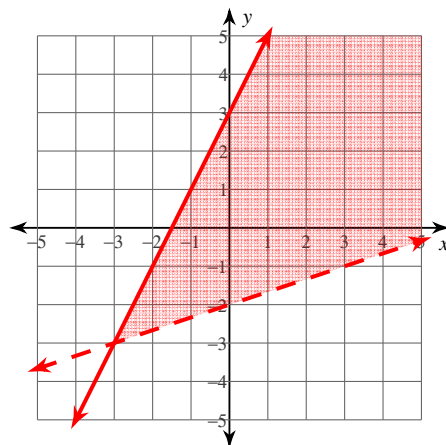
17) $3x - y < -3$
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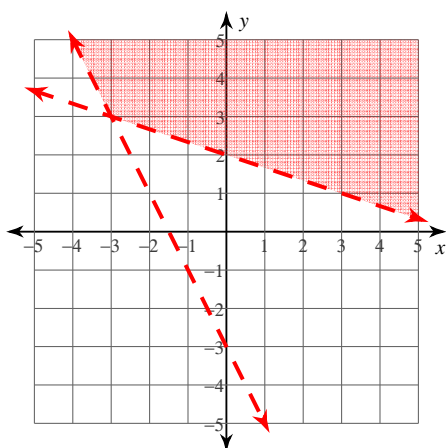
18) $x > 2$
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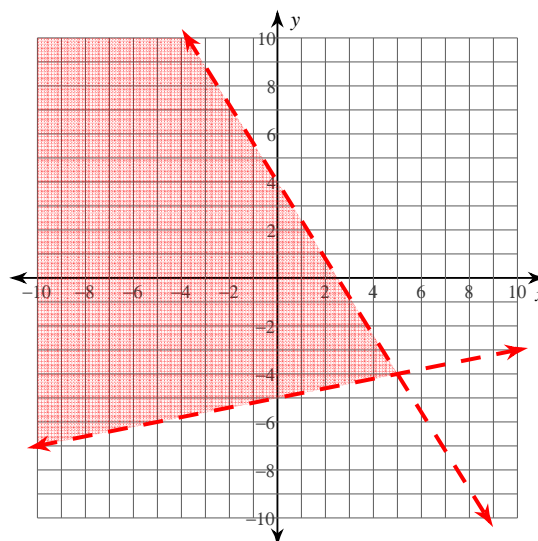
19) $2x - y \geq -3$
 $x - 3y < 6$



20) $2x + y > -3$
 $x + 3y > 6$

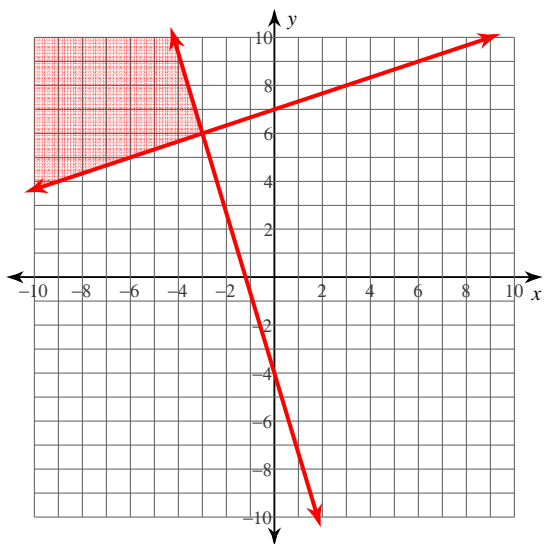


21) $y > \frac{1}{5}x - 5$
 $y < -\frac{8}{5}x + 4$



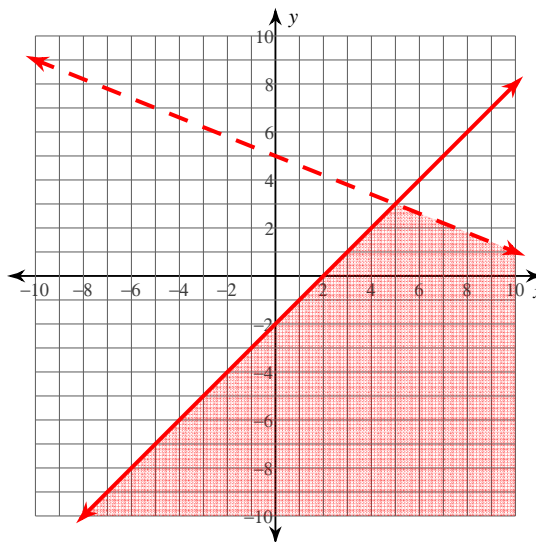
$$22) y \leq -\frac{10}{3}x - 4$$

$$y \geq \frac{1}{3}x + 7$$



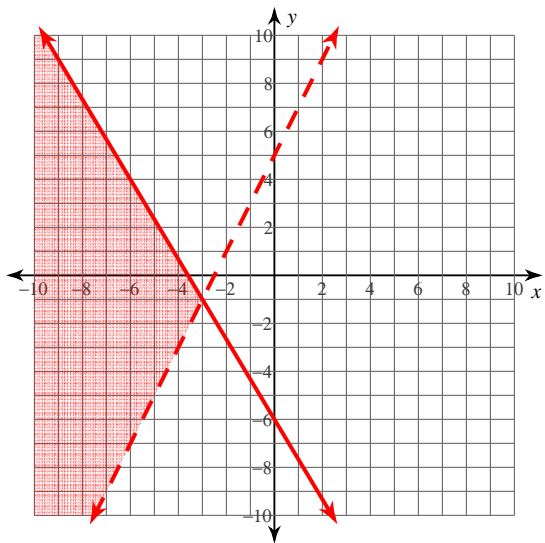
$$23) y \leq x - 2$$

$$y < -\frac{2}{5}x + 5$$



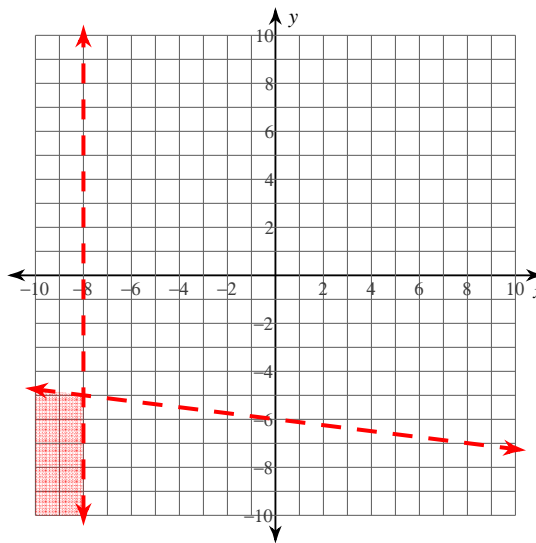
$$24) y \leq -\frac{5}{3}x - 6$$

$$y > 2x + 5$$



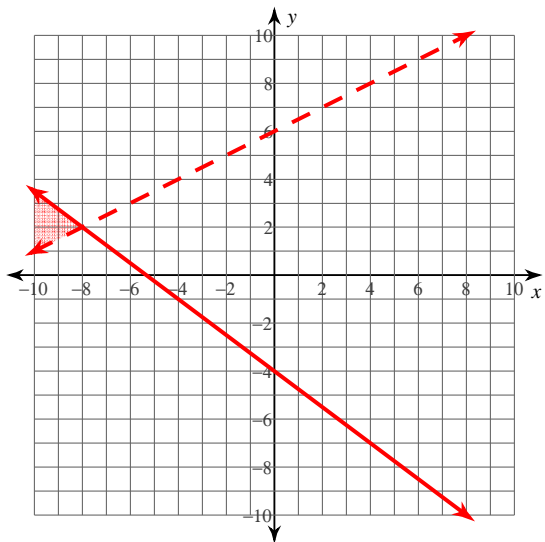
$$25) x < -8$$

$$y < -\frac{1}{8}x - 6$$



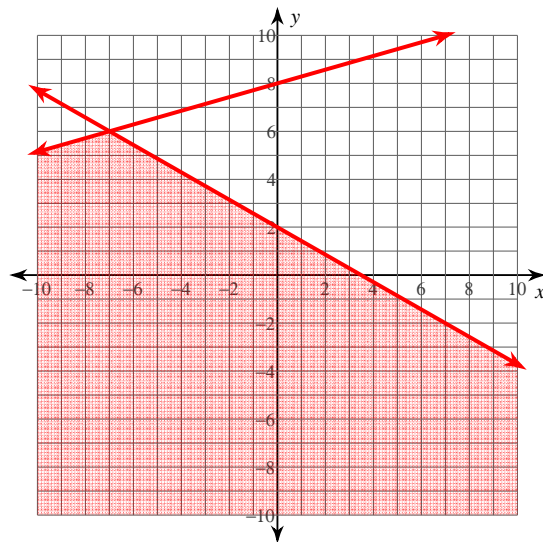
$$26) y > \frac{1}{2}x + 6$$

$$y \leq -\frac{3}{4}x - 4$$



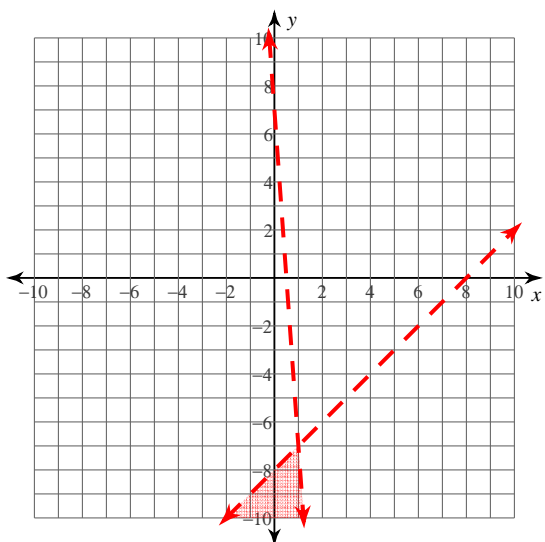
$$27) y \leq \frac{2}{7}x + 8$$

$$y \leq -\frac{4}{7}x + 2$$



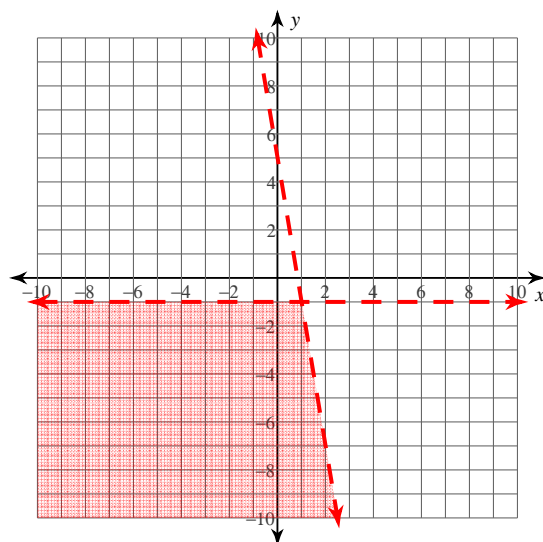
$$28) y < x - 8$$

$$y < -14x + 7$$

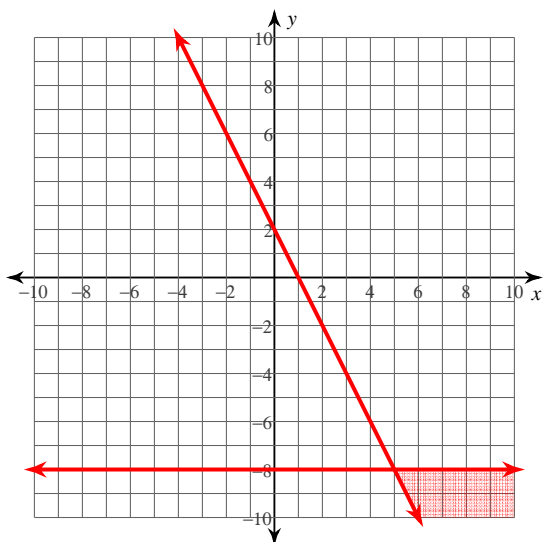


$$29) y < -1$$

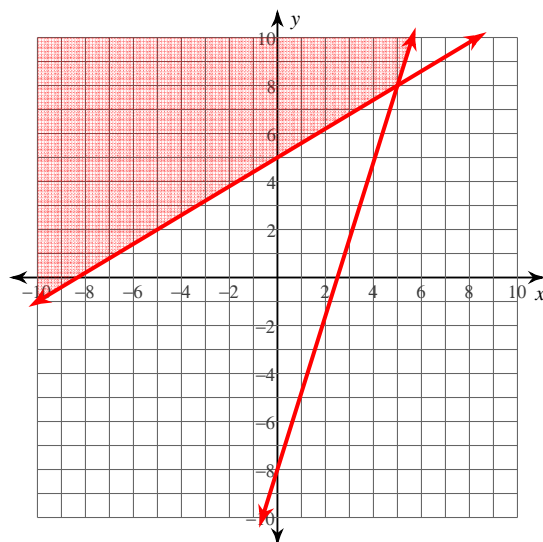
$$y < -6x + 5$$



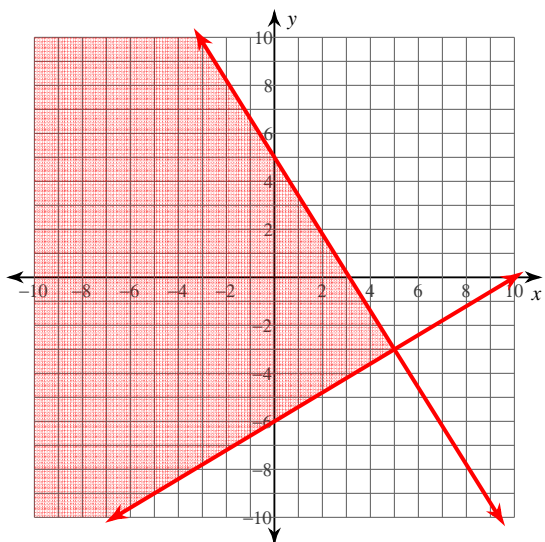
30) $y \leq -8$
 $y \geq -2x + 2$



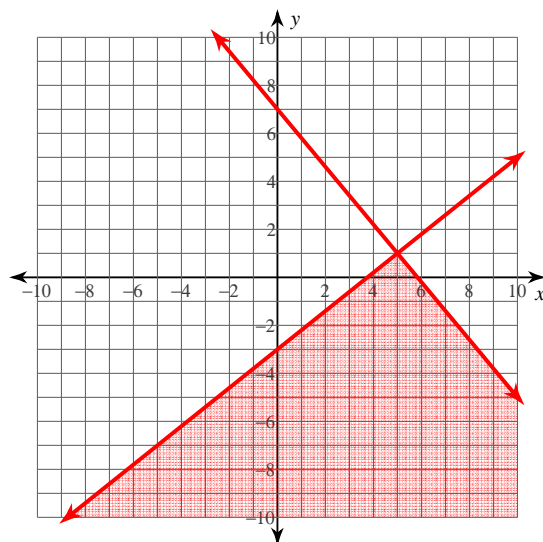
31) $16x - 5y \leq 40$
 $3x - 5y \leq -25$



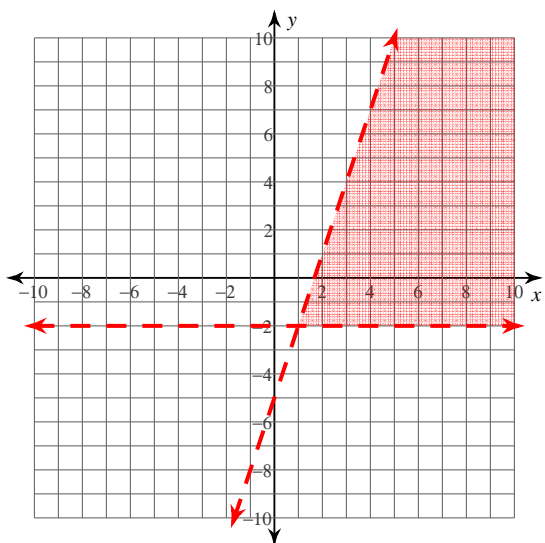
32) $3x - 5y \leq 30$
 $8x + 5y \leq 25$



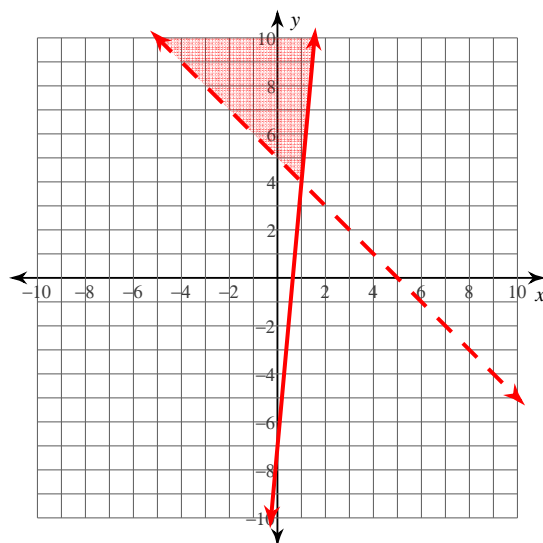
33) $4x - 5y \geq 15$
 $6x + 5y \leq 35$



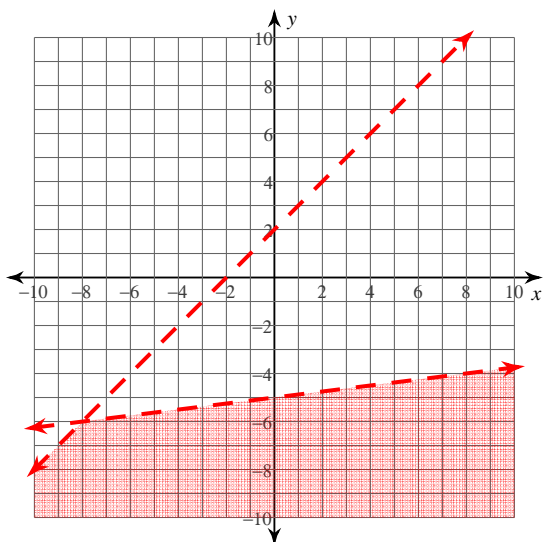
34) $3x - y > 5$
 $y > -2$



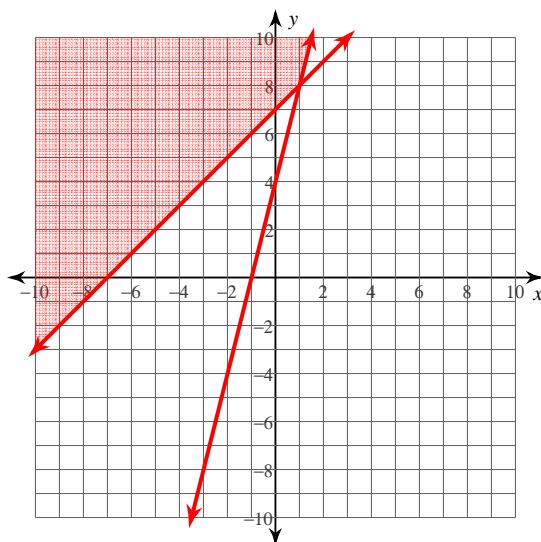
35) $11x - y \leq 7$
 $x + y > 5$



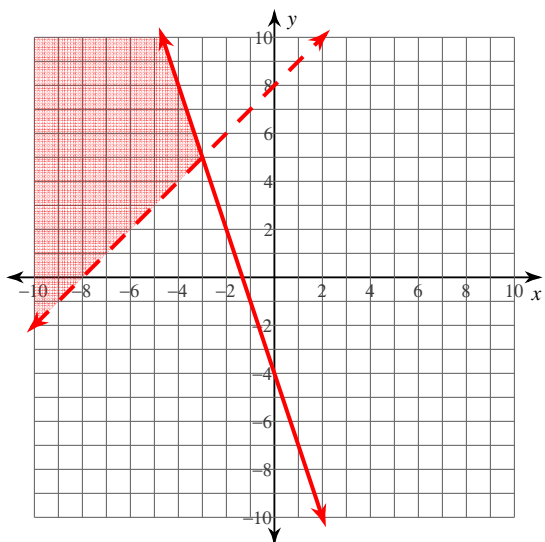
36) $x - 8y > 40$
 $x - y > -2$



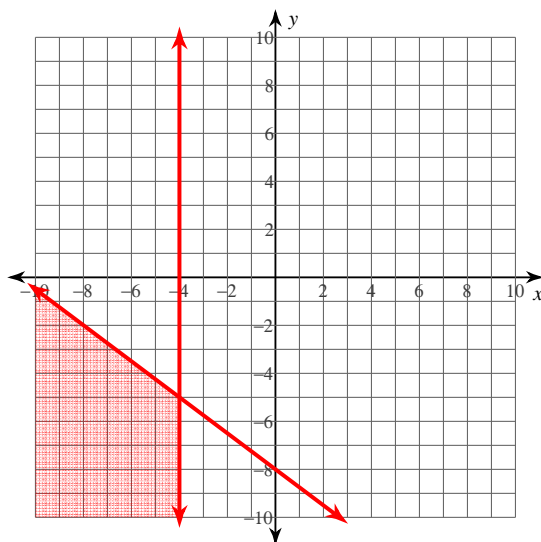
37) $x - y \leq -7$
 $4x - y \leq -4$



38) $x - y < -8$
 $3x + y \leq -4$



39) $3x + 4y \leq -32$
 $x \leq -4$



40) $3x + 2y \leq 2$
 $x + 3y > -18$

