

Quiz

①

$$A \{ 4, 5, 6, 7, 8, 9, 10 \}$$

$$B \{ 5, 6, 7, 8, 9 \}$$

②

$$A \{ 2, 4, 6 \} \text{ intersection}$$

$$B \{ 1, 3, 5 \}$$

③

$$A \{ x \mid x \text{ is positive multiple of } 7 \}$$

$$\{ 7, 14, 21, 28, \dots \}$$

$$B \{ x \mid x \text{ is a pos mult of } 6 \}$$

$$\{ 6, 12, 18, 24, \dots \}$$

4 List all subsets

A $\{3, 6, 9\}$ $2^3 = 8$

$\{\}, \{3\}, \{6\}, \{9\}$

$\{3, 6\}, \{3, 9\}, \{6, 9\}$

$\{3, 6, 9\}$

same
as
 $\{9, 6\}$

B $\{1, 5, 8\}$

$\{\}, \{1\}, \{5\}, \{8\}$

$\{1, 5\}, \{1, 8\}, \{5, 8\}, \{1, 5, 8\}$

5 A {6, 7, 8, 9, 11}

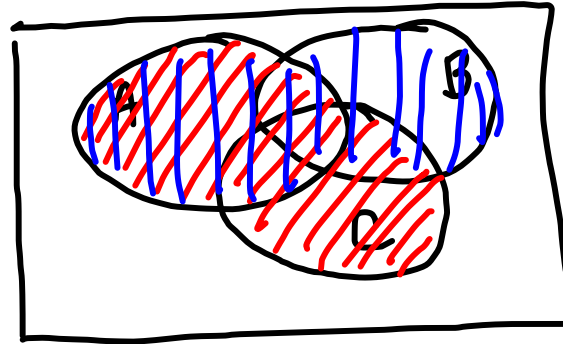
of subsets = $2^5 = 32$

B {6, 7, 8, 9}

$2^4 = 16$ subsets

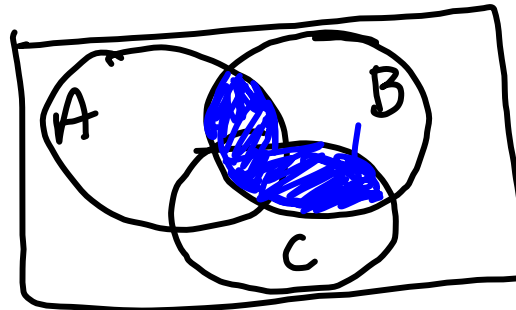
$$6 \quad A \quad C \cup A$$

↑

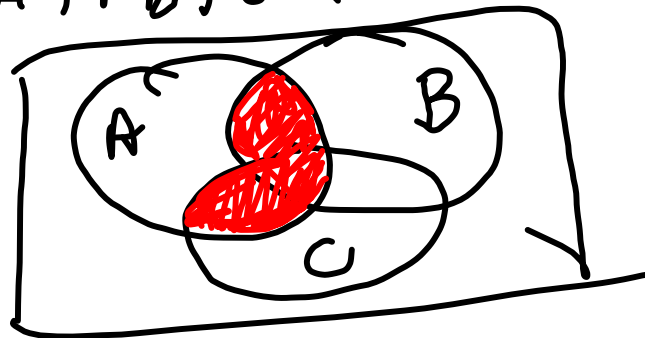


$$B \quad B \cup A$$

$$7 \quad B (A \cap B) \cup (B \cap C)$$



$$A (A \cap B) \cup (A \cap C)$$



Test Taking Skills - Blue

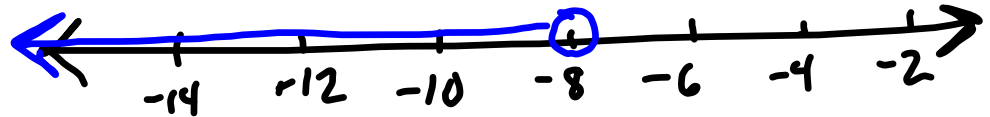
Setting up linear equations

Salmon

$$\textcircled{24} (4) - \frac{3}{4}y > 6(4)$$

$$\frac{-3y}{-3} > \frac{24}{-3}$$

$$y < -8$$



$$\textcircled{44} \quad 6\left(\frac{7}{6}y + \frac{4}{3}\right) \leq \left(\frac{11}{6}y - \frac{7}{6}\right)6$$

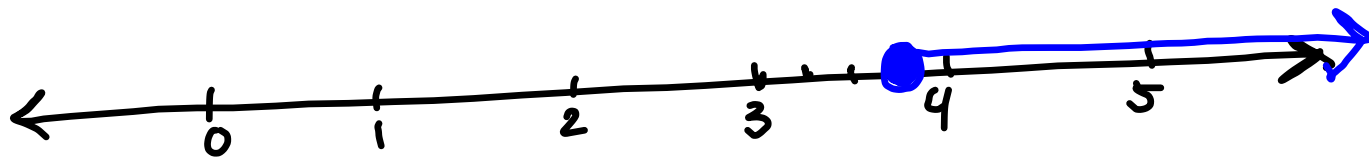
$$\text{LCD} = 6$$

$$7y + 8 \leq 11y - 7$$

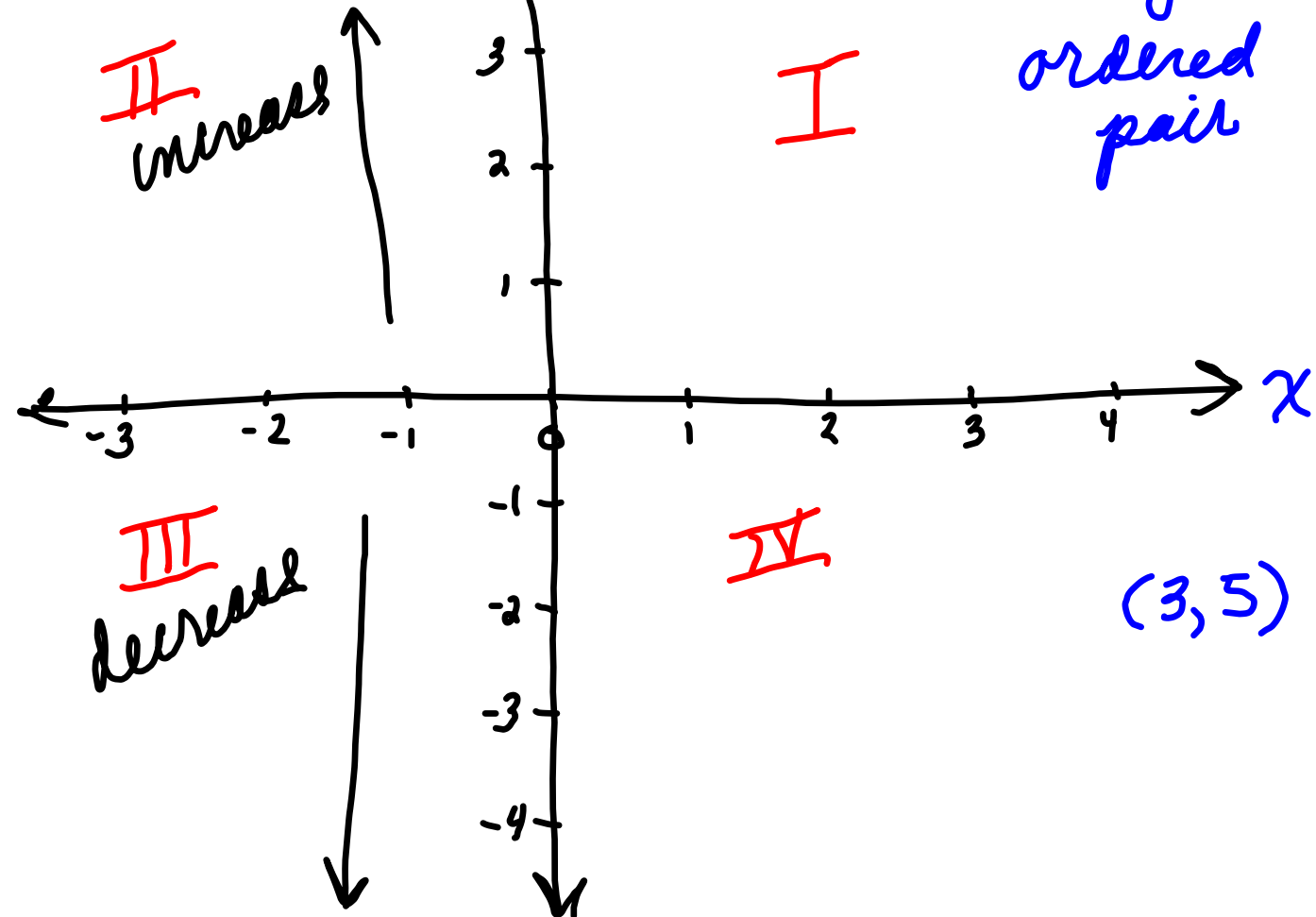
$$\begin{array}{r} 7y + 8 \leq 11y - 7 \\ -8 \quad -8 \\ \hline 7y \leq 11y - 15 \\ -11y \quad -11y \\ \hline -4y \leq -15 \end{array}$$

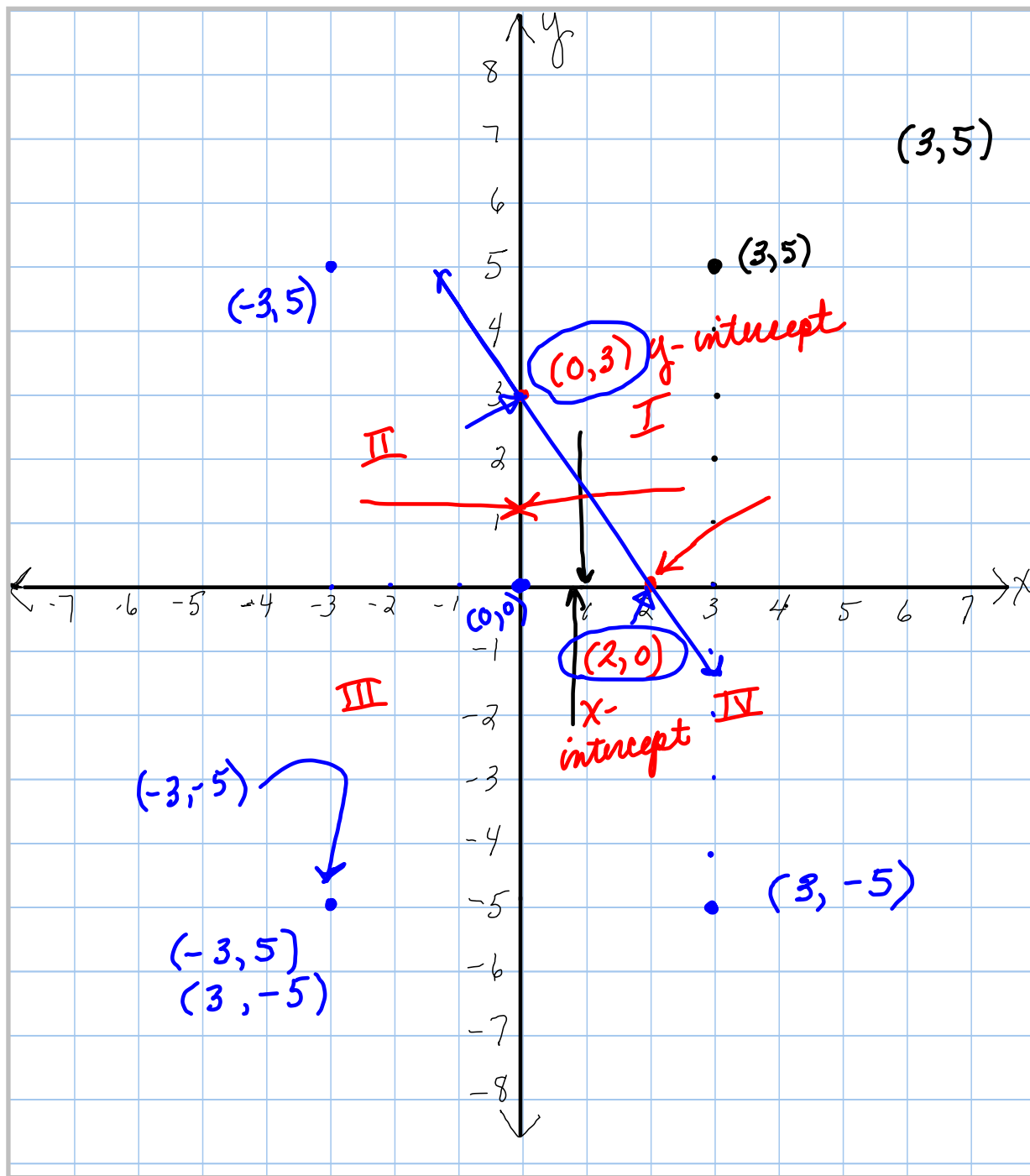
$$\begin{array}{r} -4y \leq -15 \\ \hline -4 \quad -4 \\ \hline y \geq \frac{15}{4} \end{array}$$

$$y \geq \frac{15}{4}$$



3.1 A beginning vertical axis





3.2

$$\begin{array}{rcl} 3x - 2 & = & 10 \\ + 2 & + 2 & \\ \hline 3x & = & 12 \\ \frac{3}{3} & \frac{12}{3} & \\ x & = & 4 \end{array}$$

single dimensions



$$y - 3x = -5$$

$$(4) - 3(3) = -5$$

$$4 - 9 = -5$$

$$-5 = -5 \checkmark$$

yes

$$(-5) - 3(0) = -5$$

$$-5 = -5 \checkmark$$

The solution will
be an ordered pair

Is $(3, 4)$ a solution
to this equation?

$$(0, -5)$$

is also
a solution

Given $(2, y)$ find the value of y
that makes

$$y - 3x = -5 \quad \text{true}$$

$$y - 3(2) = -5$$

$$y - 6 = -5$$

$$+6 \quad +6$$

$$y = 1$$

$(2, 1)$

What if we're given $(x, 7)$
need to find x

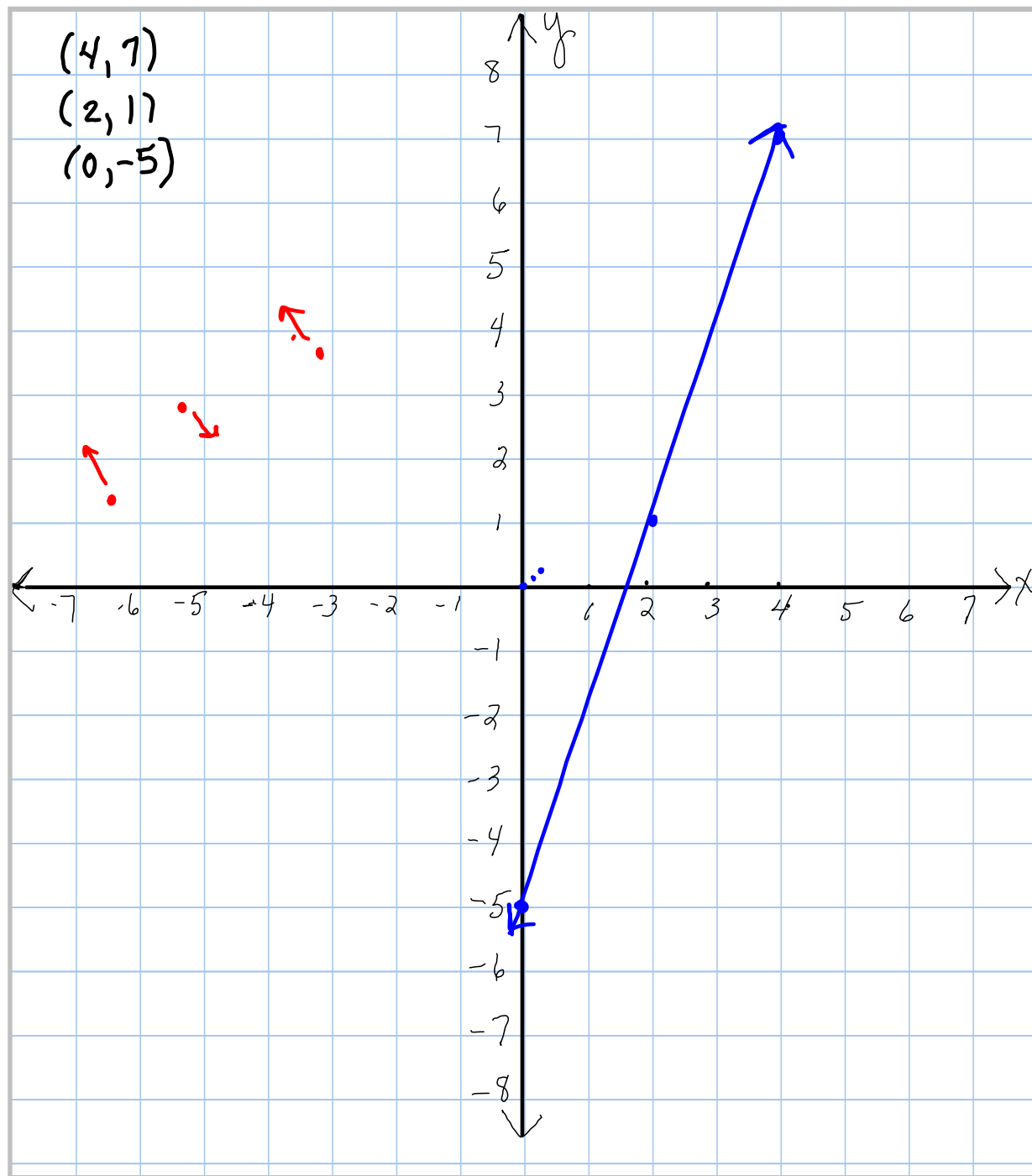
$$y - 3x = -5$$

$$\begin{array}{rcl} 7 - 3x & = & -5 \\ -7 & & -7 \end{array}$$

$$\begin{array}{rcl} -3x & = & -12 \\ \underline{-3} & & \underline{-3} \end{array}$$

$(4, 7)$

$$x = 4$$



ex) Fill in the table for

$$x - y = 8$$

x	y
3	-5
8	0
-2	-10
-12	-20

$$\begin{array}{r} 3 - y = 8 \\ -3 \quad -3 \\ \hline \end{array}$$

$$\begin{array}{r} -y = 5 \\ -1 \quad -1 \\ \hline \end{array}$$

$$y = -5$$

$$x - 0 = 8$$

$$x = 8$$

$$\begin{array}{r} -2 - y = 8 \\ +2 \quad 0 \quad +2 \\ \hline \end{array}$$

$$\begin{array}{r} -y = 10 \\ -1 \quad -1 \\ \hline \end{array}$$

$$y = -10$$

$$-2 - (-10) = 8$$

$$x - (-20) = 8$$

$$\begin{array}{r} x + 20 = 8 \\ -20 \quad -20 \\ \hline \end{array}$$

$$x = -12$$

14) Which of the following ordered pairs are solutions to

$y = 8x - 3$
 $y = \underline{mx} + \underline{b}$

$(0, 3)$

$(0, 3)$
 $(5, 16)$
 $(1, 5)$

$$3 = 8(0) - 3$$

$$3 = -3 \text{ No false}$$

$$(5, 16)$$

$$16 = 8(5) - 3$$

$$16 = 40 - 3$$

$$16 = 37 \text{ false}$$

$$(1, 5)$$

$$5 = 8(1) - 3$$

$$5 = 8 - 3$$

$$5 = 5 \checkmark \text{ yes}$$

#34 pg. 80

One Bell charges \$5.00 per month plus \$0.05 per minute

Write an equation with

y = total monthly charge
and x = # of minutes used

$$y = 5.00 + .05x$$

x	y	
0	\$5.00	(0, 5)
10	\$5.50	(10, 5.5)
20	\$6.00	(20, 6)
30	\$6.50	(30, 6.5)
50	\$7.50	