

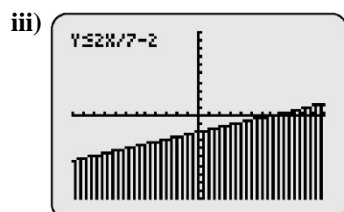
Chapter 9 BLM Answers

BLM 9-4 Section 9.1 Extra Practice

1. a) B and C b) D c) A, B, C, and D

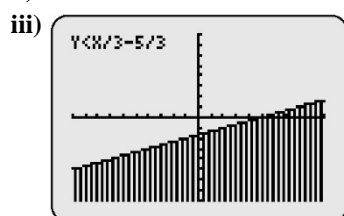
2. a) i) $y \leq \frac{2}{7}x - 2$, $m = \frac{2}{7}$, y-intercept: -2

ii) solid line



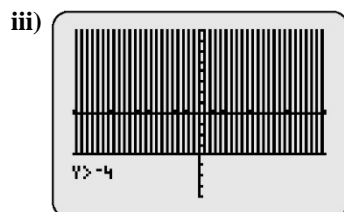
b) i) $y < \frac{1}{3}x - \frac{5}{3}$, $m = \frac{1}{3}$, y-intercept: $-\frac{5}{3}$

ii) broken line



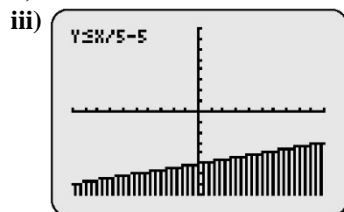
c) i) $y > -4$, $m = 0$, y-intercept: -4

ii) broken line



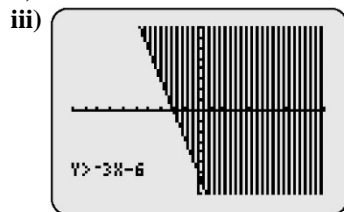
b) i) x-intercept: 25, y-intercept: -5

ii) solid line



c) i) x-intercept: -2, y-intercept: -6

ii) broken line

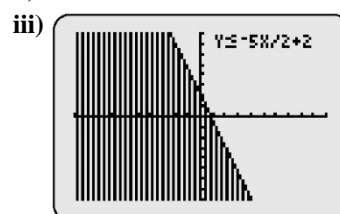


d) i) x-intercept: -5, y-intercept: none

ii) broken line

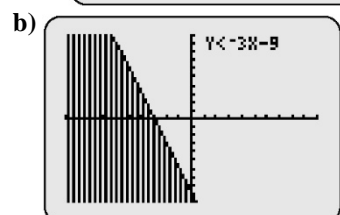
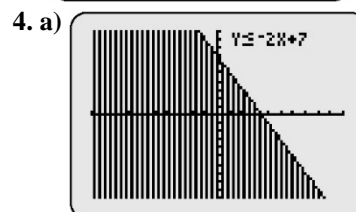
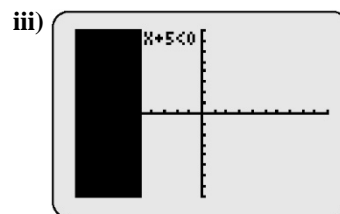
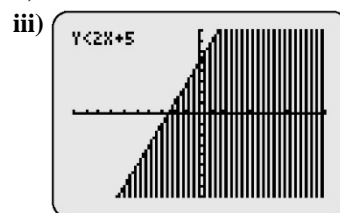
d) i) $y \leq -\frac{5}{2}x + 2$, $m = -\frac{5}{2}$, y-intercept: 2

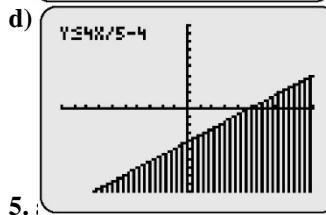
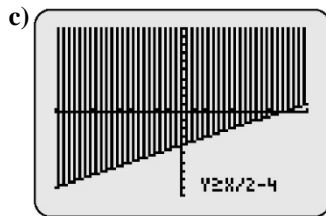
ii) solid line



3. a) i) x-intercept: $-\frac{5}{2}$, y-intercept: 5

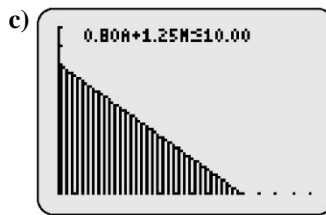
ii) broken line





5. here a is the number of apples and m is the number of muffins

b) The number of apples and the number of muffins must be an integer greater than or equal to zero, or $\{a \mid a \geq 0, a \in \mathbb{I}\}$ and $\{m \mid m \geq 0, m \in \mathbb{I}\}$.

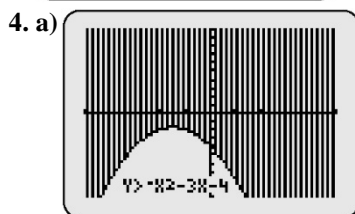
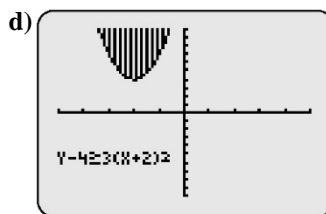
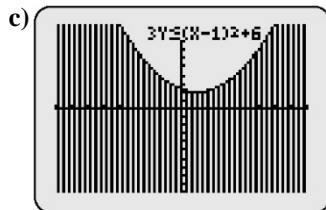


d) You cannot buy 0.8 of a muffin.

6. a) $y \leq \frac{1}{2}x + 2$ b) $y \geq 1$ c) $y < -2x - 3$

BLM 9-5 Section 9.2 Extra Practice

1. a) $x = 1, x = -7$ b) $x < -7$ or $x > 1$ c) $-7 < x < 1$
 2. a) $-2, -3$ b) $-3 < x < -2$ c) $x < -3$ or $x > -2$
 3. a) yes b) yes c) no d) yes



4. a) $x < -5$ or $x > 1$ b) $-1 \leq x \leq 3$ c) $-1 \leq x \leq \frac{3}{2}$ d) 1

$-\sqrt{3} \leq x \leq 1 + \sqrt{3}$

5. a) $x < 2$ or $x > \frac{9}{4}$ b) $-\frac{5}{4} \leq x \leq \frac{3}{2}$

c) no solution d) $x = \frac{3}{2}$

6. a) $2 - \sqrt{7} < x < 2 + \sqrt{7}$ b) $\frac{3 - \sqrt{29}}{2} \leq x \leq \frac{3 + \sqrt{29}}{2}$

c) $x \leq -2 - \sqrt{10}$ or $x \geq -2 + \sqrt{10}$

d) $\frac{-11 - \sqrt{93}}{2} \leq x \leq \frac{-11 + \sqrt{93}}{2}$

7. a) $x = 0$ or $x = -6$ b) $x < -6$ or $x > 0$

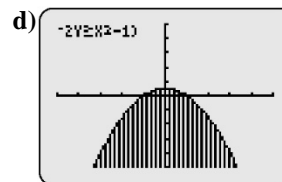
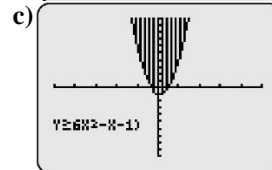
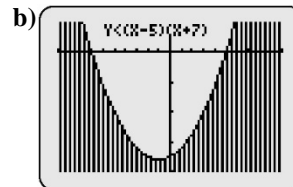
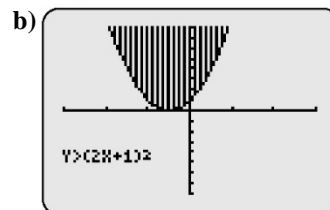
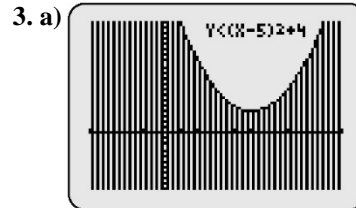
c) $-5 \leq x \leq -1$

BLM 9-6 Section 9.3 Extra Practice

1. a) B and D b) A and B c) B and C d) B and C

2. a) $y \leq (x - 3)(x + 2)$ b) $y \geq x^2 + 8x + 12$

c) $y \leq -2(x + 1)^2 + 5$ d) $y \geq 2x^2 - 3x + 4$



5. $10x^2 + 9y - 90 < 0$ or $y < -\frac{10}{9}x^2 + 10$



