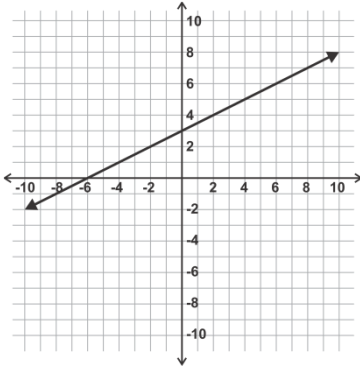


Systems of Linear Equations and Inequalities

Solving Linear Systems by Graphing

Review Queue Answers

1. **ans-0301-01**



2. $y = \frac{4}{3}x - 2$

3. $x = 5$

Checking a Solution for a Linear System

1. B
2. C
3. D
4. A
5. Yes
6. No
7. Yes
8. No
9. Yes
10. Yes
11. The solution is the point where the two lines intersect or the point which lies on both lines.
12. If the lines never intersect (parallel) there will be no solution. Also, if the lines overlap (coincident) then there will be infinite solutions- not one unique solution.

Solving Systems with One Solution Using Graphing

1. D
2. C
3. A
4. B
5. (5, -1)
6. (3, 2)
7. (-1, 3)
8. (4, 0)
9. (-2, -5)
10. (-3, 2.5)
11. (-2.31, 10.01)
12. (9.26, 0.50)
13. (1.55, 1.29)
14. Bargain Bikes: 1 hour = \$6.50, 10 hours = \$20.00; Frugal Wheels: 1 hour = \$7.25, 10 hours = \$18.50
 $y = 1.5x + 5$
15. $y = 1.25x + 6$
16. At 4 hours both rental places charge \$11
17. Bargain Bikes

Solving Systems with No or Infinitely Many Solutions Using Graphing

1. consistent and dependent, coincident lines.
2. inconsistent, parallel lines
3. consistent and independent, intersecting lines
4. inconsistent
5. consistent and independent
6. inconsistent
7. consistent and dependent
8. consistent and dependent
9. consistent and independent
10. Answers will vary. Equations should have different slopes.

16. 9 and 6

17. apples \$0.25, oranges \$0.30

Solving Systems by Multiplying One Equation to Cancel a Variable

1. (6, -3)

2. (10, 7)

3. (-1, 4)

4. (9, 0)

5. (-11, 5)

6. $(\frac{1}{2}, 4)$

7. $(7, \frac{5}{2})$

8. (15, -13)

9. no solution

10. (2, -10)

11. $(-\frac{7}{3}, 2)$

12. infinite solutions

13. (12, -18)

14. $(-\frac{2}{3}, \frac{2}{5})$

15. infinite solutions

16. 10 ml of the 35% solution, 3 ml of the 75% solution

17. \$.50 per cookie and \$.75 per brownie

18. 8 daisies, 7 pansies

Solving Systems by Multiplying both Equations to Cancel a Variable

1. (2, 6)

2. (-3, 7)

3. (12, -13)

4. (8, 3)

5. (-2, -7)

6. (10, -8)

7. (0, 5)

8. (1, 4)

9. $(3, \frac{7}{2})$

10. infinite solutions

11. $(\frac{3}{2}, -2)$

12. $(-\frac{2}{3}, 5)$

13. (-2, -11)

14. no solution

15. $(6, \frac{9}{2})$

16. \$6.20

17. \$12

18. \$5.75

Determining the Best Method (Graphing, Substitution, Linear Combinations)

1. (3, 8)

2. (-5, -1)

3. (-2, 9)

4. (10, -7)

5. $(-\frac{1}{2}, -\frac{1}{2})$

6. (4, 6)

7. $(3, -\frac{3}{5})$

8. (2, 11)

9. $(-8, \frac{2}{3})$

10. (7, 5)

11. (-11, -13)

12. infinite solutions

13. (9, -2)

14. $(\frac{2}{7}, -1)$

15. no solution

16. Clownfish: \$1.95; goldfish: \$1.25

17. 9 and 26

18. 5 cappuccinos, 4 lattes

Graphing and Solving Linear Inequalities

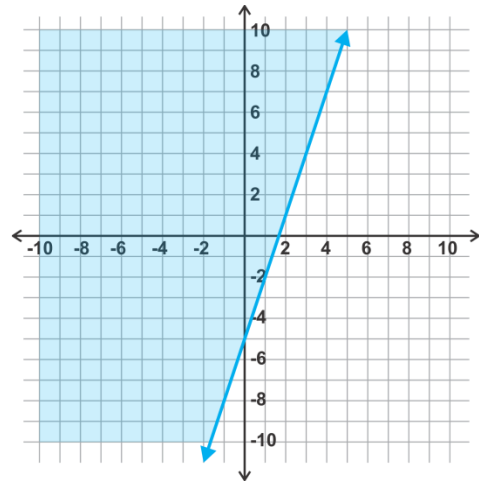
Review Queue Answers

1. a) $x \geq \frac{1}{3}$

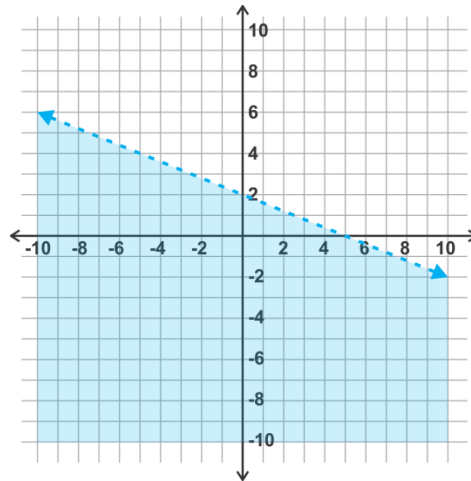
b) $x > -12$

c) $-\frac{6}{5} < x < 2$

2. **ans-0304-01**



3. **ans-0304-02**



Checking for Solutions to a System of Linear Inequalities

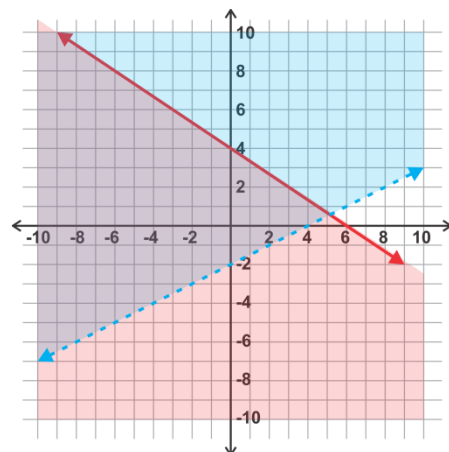
1. C
4. B
7. A
10. A
13. None
16. B
19. A, D

2. B
5. A
8. A, C, D
11. A
14. B
17. B
20. D

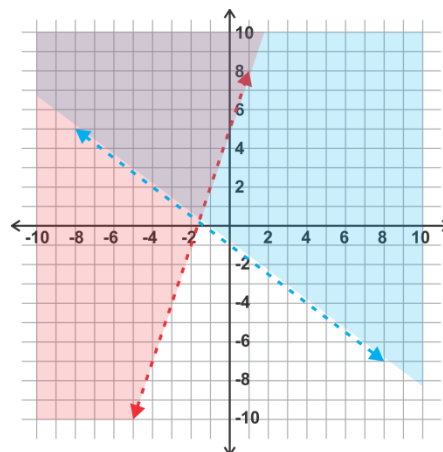
3. C
6. D
9. C
12. D
15. D
18. C

Graphing Systems of Linear Inequalities

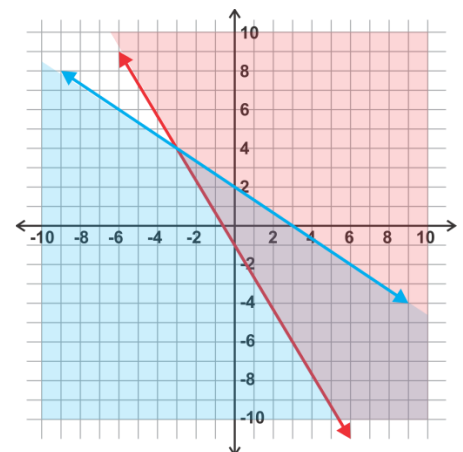
1. **ans-0304-03**



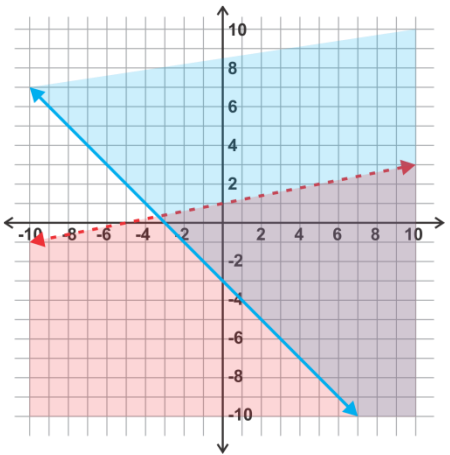
2. **ans-0304-04**



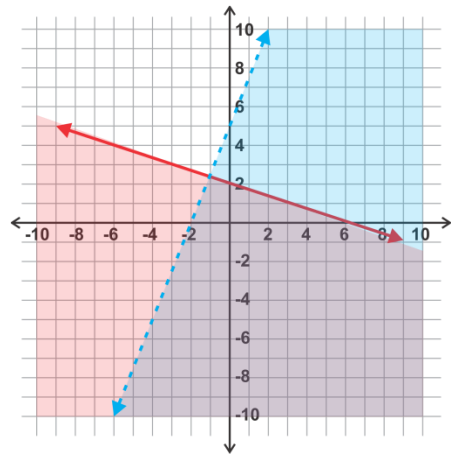
3. **ans-0304-05**



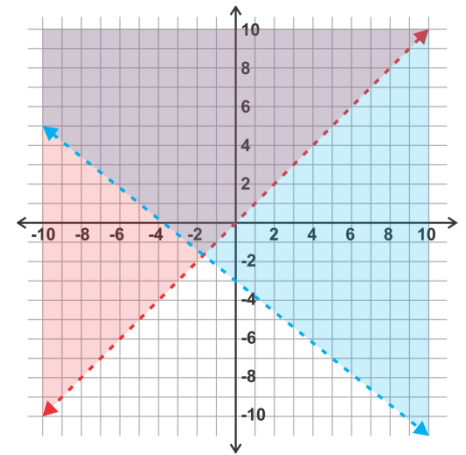
4. ans-0304-06



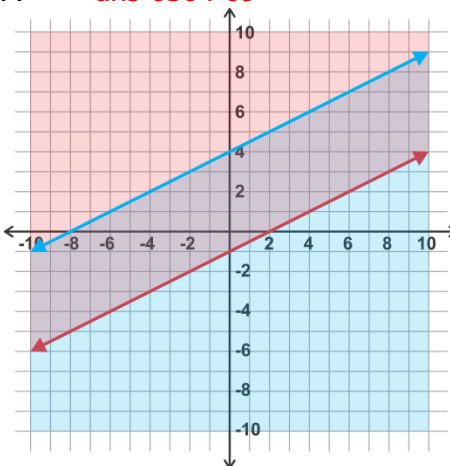
5. ans-0304-07



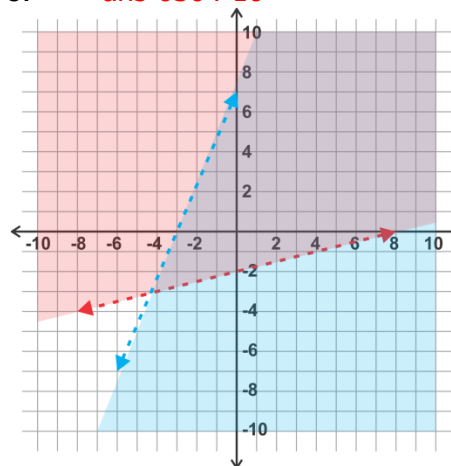
6. ans-0304-08



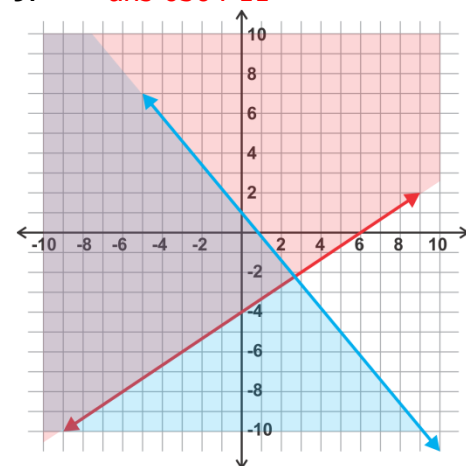
7. ans-0304-09



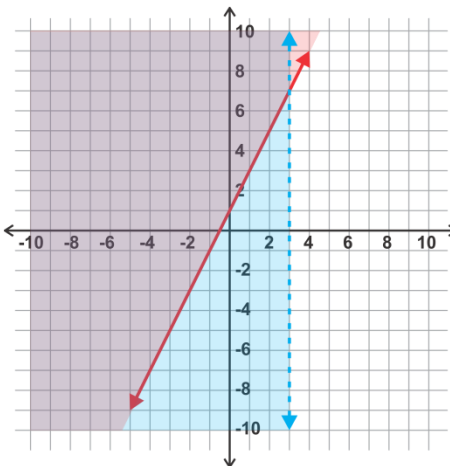
8. ans-0304-10



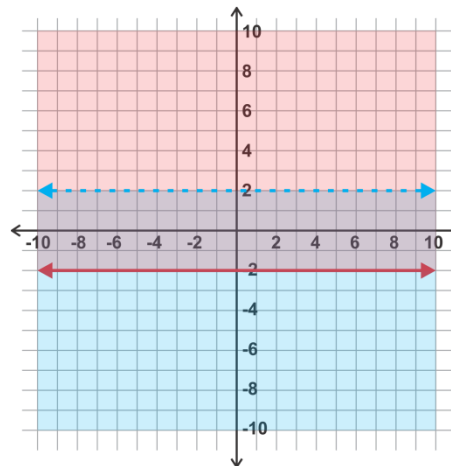
9. ans-0304-11



10. ans-0304-12



11. ans-0304-13



12. ans-0304-14

