

# ANSWERS FOR 3.4

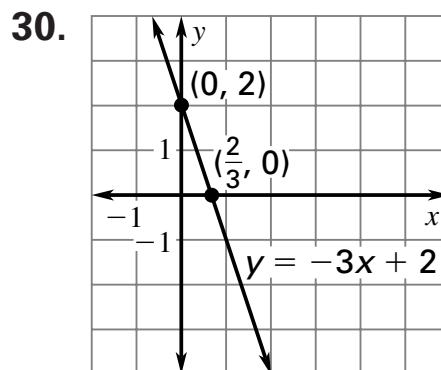
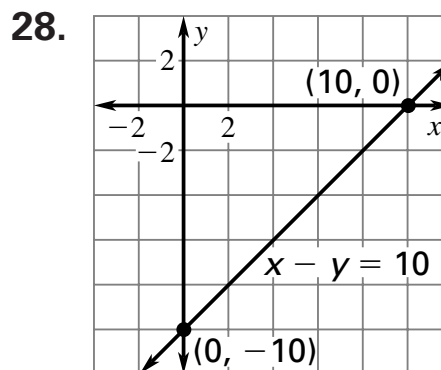
For use with pages 166–169

## 3.4 Guided Practice

2. The value of the objective function is tested at various points of the feasible region to determine where it is a maximum and/or minimum; the system of constraints define the feasible region.
4.  $(0, 0), (0, 3), (2, 4), (4, 0)$
6.  $0 \leftarrow$  minimum  
At  $\left(\frac{5}{2}, 5\right): \frac{15}{2} \leftarrow$  maximum
8. Buy 80 large baskets and sell them for a profit of \$800.00.
10.  $(-2, -6): -34 \leftarrow$  minimum  
 $(1, 5): 27 \leftarrow$  maximum
12.  $(0, 0): 0 \leftarrow$  minimum  
 $(0, 9): 27 \leftarrow$  maximum
14.  $(0, 2): 2 \leftarrow$  maximum  
 $(-5, -2): -12 \leftarrow$  minimum
16. no minimum or maximum; feasible region is unbounded
18.  $(0, 0): 0 \leftarrow$  minimum  
 $(9, 5): 65 \leftarrow$  maximum

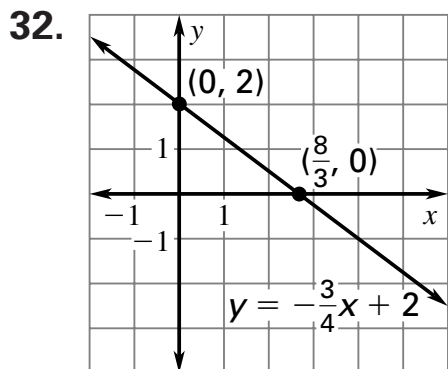
20.  $(0, 4): 12 \leftarrow$  minimum  
 $\left(\frac{13}{3}, \frac{13}{3}\right): 56\frac{1}{3} \leftarrow$  maximum
22. Purchase 2 of type A and 9 of type B for a total storage capacity of  $186 \text{ ft}^3$ .
24. Eat about 1.887 cups of pinto beans and no rice for a total cost of \$1.08.
26. A

## 3.4 Mixed Review



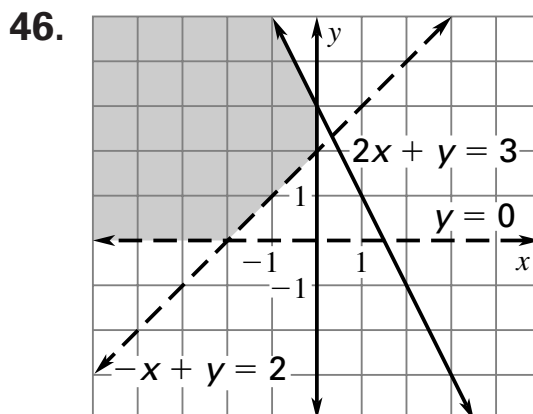
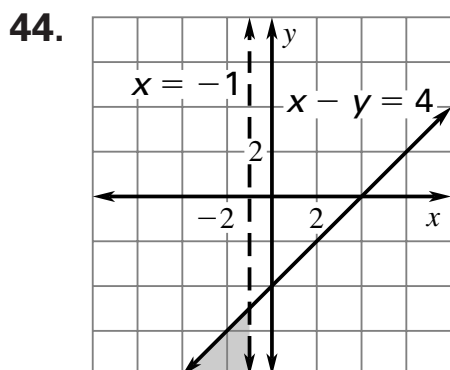
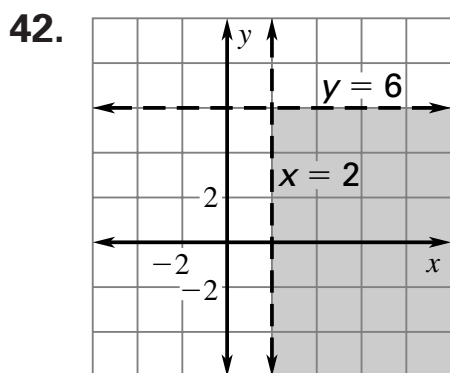
# ANSWERS FOR 3.4 (CONT.)

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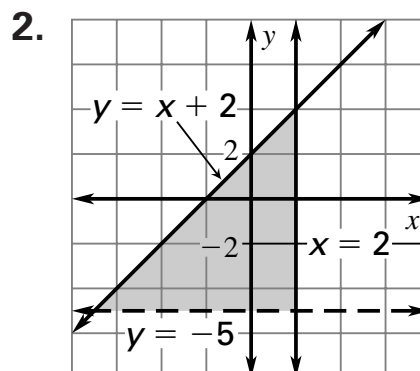
34.  $-5$                       36.  $-31$

38.  $3$                               40.  $7$



48. Play 6 games of each.

## Quiz 2



4.  $(-2, 6)$ :  $2 \leftarrow$  maximum  
 $(-4, 1)$ :  $-18 \leftarrow$  minimum

6.  $(14, 0)$ :  $70 \leftarrow$  maximum  
 $(0, 0)$ :  $0 \leftarrow$  minimum

## Math and History

2. 60