LESSON 4.2 **Challenge Practice**

For use with the lesson "Use Linear Equations in Slope-Intercept Form"

In Exercises 1–4, a line with the given slope contains the given point. Find the *y*-intercept of the line.

1. $m = 3$; $(a, 2)$

2. $m = a$; $(b, 2)$

3. $m = a$; (b, c)

4. $m = 0$; $(1, 2)$

In Exercises 5–8, find the value of *k* so that the three points lie on a straight line.

5. $(1, 3)$, $(2, k)$, $(4, 9)$

6. $(2, 7)$, $(k, 10)$, $(8, 16)$

7. $(-1, k)$, $(-2, 4)$, $(2, 2)$

8. $(-4, 2)$, $(4, k)$, $(3, 2)$

In Exercises 9–12, write an equation of the line in slope-intercept form.

9. The line that passes through $(2, 6)$ and has the same slope as the line $2x + 3y = 4$

10. The line that passes through $(-1, -3)$ and has the same slope as the line $y = 4$

11. The line that passes through $\left(5, \frac{1}{3}\right)$ and has the same slope as the line $x + y = \frac{4}{3}$

12. The line that passes through $(1, -1)$ and whose slope is the negative of the slope of the line $x + y = 4$

LESSON 4.2