MATh on the Fly!

NAME: _____ DATE: _____

Writing Lines in Slope–Intercept Form

Put each line in slope–intercept form.
Then state the slope and y–intercept.

1. $2x + 3y = 12$

2. $y - 2 = 4(x + 5)$

3. $y + 1 = \dfrac{1}{2}(x - 10)$

4. $8x - 2y = 16$

5. $3x + 6y = -6$

6. $y - 3 = -7(x - 1)$

For each problem, the slope of a line and a point it passes through is given.
Find the equation of the line in slope–intercept form.

7. $m = 3$, point = (2,5)

8. $m = -2$, point = (1,–4)

9. $m = \dfrac{2}{3}$, point = (–6,0)

10. $m = -\dfrac{1}{2}$, point = (–2,7)

11. $m = -5$, point = (–1,–2)

12. $m = 4$, point = (3,11)

SOLUTIONS

1. $y = \dfrac{-2}{3}x + 4$

2. $y = 4x + 22$

3. $y = \dfrac{1}{2}x - 6$

4. $y = 4x - 8$

5. $y = \dfrac{-1}{2}x - 1$

6. $y = -7x + 10$

7. $y = 3x - 1$

8. $y = -2x - 2$

9. $y = \dfrac{2}{3}x + 4$

10. $y = \dfrac{-1}{2}x + 6$

11. $y = -5x - 7$

12. $y = 4x - 1$