

Practice

Writing Linear Equations

Write an equation in slope-intercept form for each line described.

1. slope = -4 , y -intercept = 3

2. slope = 5 , passes through $A(-3, 2)$

3. slope = -4 , passes through $B(3, 8)$

4. slope = $\frac{4}{3}$, passes through $C(-9, 4)$

5. slope = 1 , passes through $D(-6, 6)$

6. slope = -1 , passes through $E(3, -3)$

7. slope = 3 , y -intercept = $\frac{3}{4}$

8. slope = -2 , y -intercept = -7

9. slope = -1 , passes through $F(-1, 7)$

10. slope = 0 , passes through $G(3, 2)$

11. **Aviation** The number of active certified commercial pilots has been declining since 1980, as shown in the table.

a. Find a linear equation that can be used as a model to predict the number of active certified commercial pilots for any year. Assume a steady rate of decline.

b. Use the model to predict the number of pilots in the year 2003.

Number of Active Certified Pilots	
Year	Total
1980	182,097
1985	155,929
1990	149,666
1993	143,014
1994	138,728
1995	133,980
1996	129,187

Source: U. S. Dept. of Transportation