Name _____ Date _____

LESSON 4.7

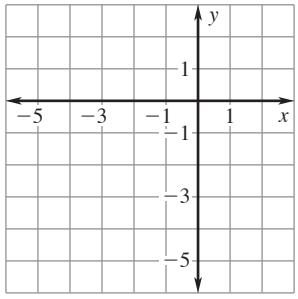
Practice C

For use with the lesson "Predict with Linear Models"

Make a scatter plot of the data. Find the equation of the best-fitting line. Approximate the value of y for $x = -2$.

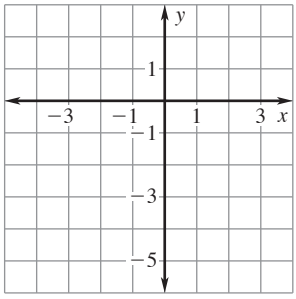
1.

x	-5	-3	-1	1	2
y	1	0	-2	-2	-3



2.

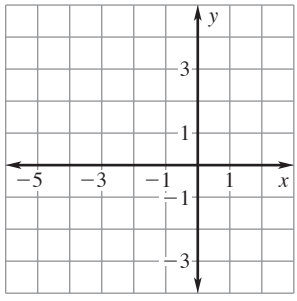
x	-4	-3	-1	1	2
y	-4	-3.2	-2.5	-2	-1



Make a scatter plot of the data. Find the equation of the best-fitting line. Approximate the value of y for $x = 1.25$.

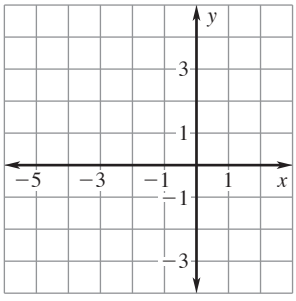
3.

x	-3	-2	-1	0	1
y	3	1.5	0.25	-1	-3



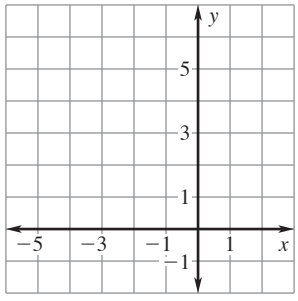
4.

x	-3	-2	-1	0	1
y	-1	0	0.25	0.75	2



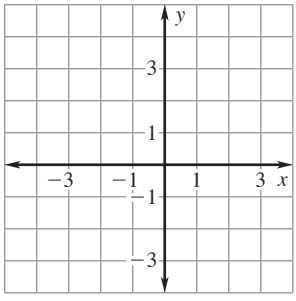
5.

x	-4	-3	-2	-1	0
y	6	4	3	3	1



6.

x	-3	-2	-1	0	1
y	-3	-1	0	2	4



Name _____ Date _____

LESSON 4.7

Practice C *continued*

For use with the lesson "Predict with Linear Models"

Find the zero of the function.

7. $f(x) = 4.8x + 1.2$

8. $f(x) = 2.5x - 0.5$

9. $f(x) = 1.5x - 0.3$

10. $f(x) = -0.4x - 0.36$

11. $f(x) = 52 - 1.3x$

12. $f(x) = \frac{3}{4}(x - 8)$

13. $f(x) = -3(x + 4)$

14. $f(x) = 4(2x - 1)$

15. $f(x) = 6(3x + 5) - 4$

16. $f(x) = 4(3x - 3) + 2$

17. $f(x) = \frac{1}{2}(4x - 3) + 1$

18. $f(x) = -\frac{2}{3}(6x - 3) + 2$

19. $f(x) = -3\left(\frac{3}{4}x + 5\right)$

20. $f(x) = 4\left(-\frac{1}{2}x + 5\right)$

21. $f(x) = \frac{1}{2}\left(\frac{4}{3}x - 6\right)$

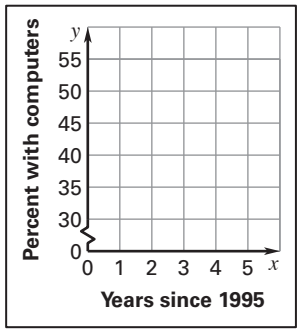
22. **Computers** The table shows the percent of U.S. households with computers from 1995 to 2000.

Year	1995	1996	1997	1998	1999	2000
Percent with computers	31.7	35.5	39.2	42.6	48.2	53.0

a. Make a scatter plot of the data where x represents the number of years since 1995 and y represents the percent of households with computers.

b. Find an equation that models the percent of households as a function of the number of years since 1995.

c. Predict how many households will have computers in 2009.



23. **Corded Telephones** The table shows the sales (in millions of dollars) of corded telephones in the United States from 1990 to 2002.

Year	1990	1999	2000	2001	2002
Sales (millions of dollars)	765	688	678	666	660

a. Make a scatter plot of the data where x represents the number of years since 1990 and y represents the sales (in millions of dollars).

b. Find an equation that models the sales as a function of the number of years since 1990.

c. How well do you think your model fits the data? *Explain* your reasoning.

d. Use your model to estimate the sales in 1995.

e. The actual sales in 1995 were 668 million dollars. How well does this fit with your answer to part (d)? Do you think your model is still a good model? *Explain.*