

Algebra 2

0-Extra Practice

0-01

1. Solve $3(x + 2) = 4x - 7$ 2. Solve $-16x + 8 \geq 40$ 3. Solve for y : $5x - 2y = 10$

0-02

4. Standard room temperature is 20°C . What is this in Fahrenheit?
 5. A squirrel is burying nuts for winter. The table shows how many nuts, n , it has buried in t minutes. If the pattern continues, how many nuts will the squirrel bury in 20 minutes?

t (min)	1	2	3	4
f (nuts)	2	4	6	8

0-03

6. Solve $|x - 4| = 12$ 7. Solve $|2x + 1| = 11$ 8. Solve $2|x - 4| \geq 15$

0-04

9. Find the slope of the line through $(-2, -4)$ and $(5, 3)$.
 10. Write the equation of the line with slope $= \frac{1}{2}$ and passes through $(2, 4)$.
 11. Write the equation of the line that passes through $(-2, -4)$ and $(5, 3)$.

0-05

12. Graph $y = -\frac{1}{3}x + 1$ 13. Graph $y = 2x$
 14. Graph $2x - 5y = 10$.

0-06

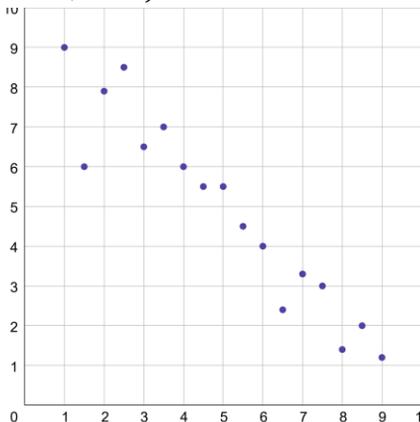
15. Describe the transformation. $-2f(x) + 1$ 16. Graph $y = 3|x - 2|$.

0-07

17. Graph $y > x + 1$. 18. Graph $y \leq \frac{1}{2}|x - 1|$.

0-08

19. For each scatter plot, a) tell whether the data have a *positive correlation*, a *negative correlation*, or approximately *no correlation*, and b) tell whether the correlation coefficient is closest to -1 , -0.5 , 0 , 0.5 , or 1 .

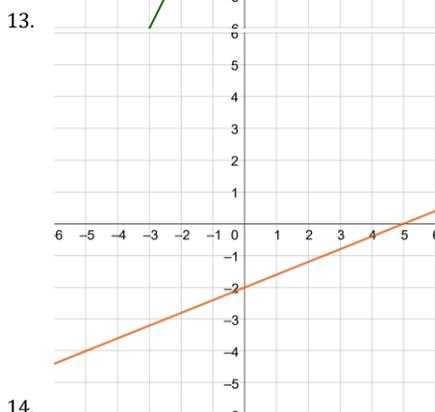
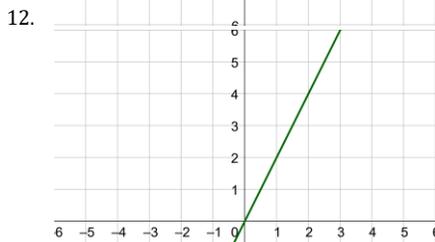
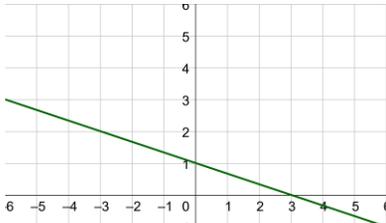


20. Draw a scatter plot using the data in the table, then write the equation of the best-fitting line.

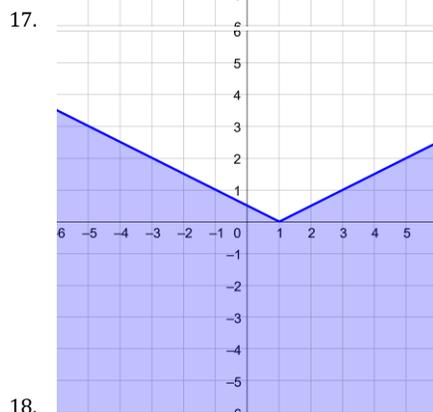
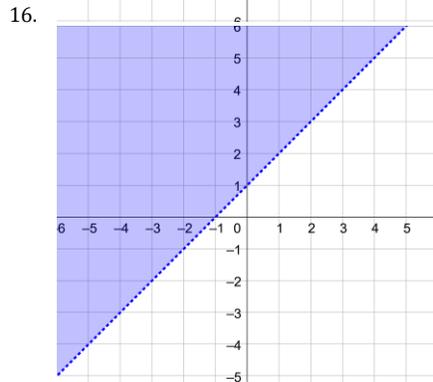
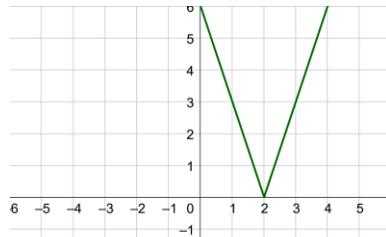
x	0	1	2	3	4	5	6	7	8
y	0.8	2.1	3.4	4.7	6	7.3	8.6	9.9	11.2

Answers

1. $x = 13$
2. $x \leq -2$
3. $y = \frac{5}{2}x - 5$
4. 68 °F
5. 40 nuts
6. $x = -8, 16$
7. $x = -6, 5$
8. $x \leq -\frac{7}{2}$ or $x \geq \frac{23}{2}$
9. $m = 1$
10. $y = \frac{1}{2}x + 3$
11. $y = x - 2$



- 14.
15. Reflect over x -axis, Vertical stretch by factor 2, moved 1 up



- 18.
19. Negative correlation, $r \approx -1$

