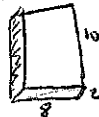
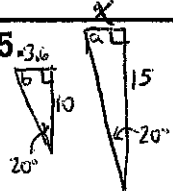
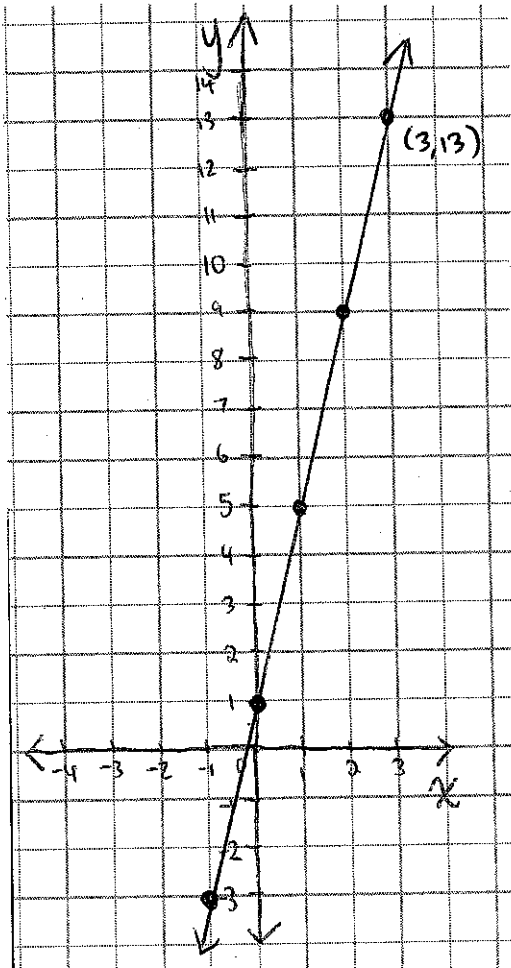


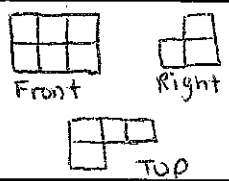


★ 1. $13\frac{1}{2}$ hours	★ 2. \$56.25	★ 3. 36 black keys
★ 4. 12 cups	5. 9 pounds	★ 6. $x=6$
★ 7. $x=44$	★ 8. $x=27$	★ 9. $x=-5$
★ 10. $m=2$	★ 11. $x=20$	★ 12. a. line a b. line b c. $-\frac{4}{3}$ d. Quadrant II
★ 13. (3, 13) is on the line (see graph on back)	★ 14. $38\text{cm}^2$	★ 15.  $160\text{in}^3$
★ 16. 0.000034	17. $14x-2$	18. $3x^2-2x-1$
★ 19. $x^2$	★ 20. -1	21. $\frac{5}{8}$
★ 22. $3.45 \times 10^7$	23. $0.62 < \frac{5}{8}$	24. a. 0.17 b. 170%
25.  $a = 70^\circ$ $b = 70^\circ$ Angle-Angle-Angle Similarity scale factor = 1.5 $x = 5.4$	★ 26. 7	★ 27. 15.6 in
28. $\frac{1}{2}$	29. $x=4, -4$	★ 30. a. Figure C b. $M'(2,2)$ $P'(7,-4)$ $N'(4,-2)$ $Q'(7,-6)$ $O'(4,-4)$ $R'(2,-6)$

#13  $y = 4x + 1$

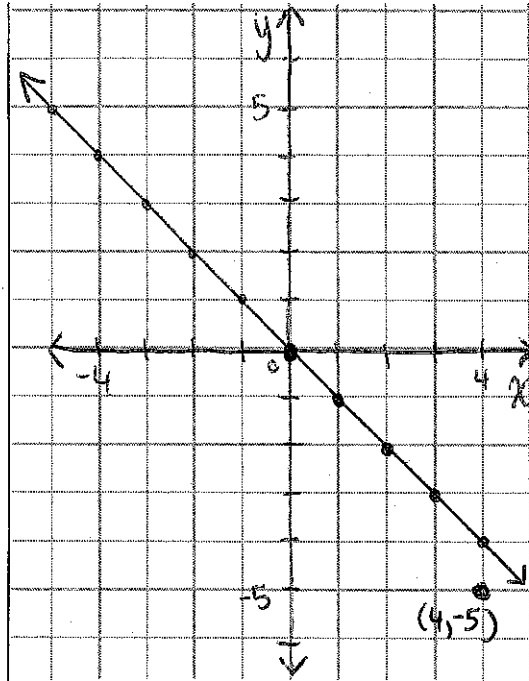


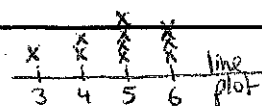
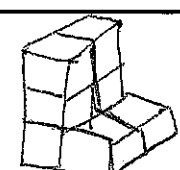
1. 4 roosters	2. \$57	3. \$1.44
★ 4. 12 dresses	★ 5. 3½ hours; 3.5 hours	★ 6. 960 hours; yes.
★ 7. x=10	★ 8. x=6	★ 9. x=10
★ 10. m = -10	11. a. {2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12} b. 2 and 12 are least likely. bc only. 1 way to make each. 7 is most likely (more combinations total 7 than any other)	12. a. linear b. -1 c. Quadrant II
13. (2, -1) (1, -4) (2, -2)	14. a. 154 in <sup>2</sup> b. 44 in.	15. 200 in <sup>3</sup> 
16. 210 in <sup>2</sup>	17. 2x - 4	18. 2b + 2h
★ 19. 1/25	★ 20. 4	21. 3 x 10 <sup>5</sup>
22. 1/9	★ 23. a. 0.95, 95% b. 95%	24. a = 80° scale factor = 5/3 x = 3 1/3
25. y/x <sup>2</sup>	★ 26. 45 in.	★ 27. 0.00001 kg.
28.  trapezoid	29. a. x = 1, -1 b. x = 20, -20	30. 

1. 36 adults	2. 12 alternates	3. 19 problems
4. $60^\circ$	5. $\frac{490\text{cm}}{1} \left( \frac{1\text{m}}{100\text{cm}} \right) = 4.9\text{m}$	6. mean = $35.6^\circ$ median = $36^\circ$ mode = $38^\circ$ Half the time it was warmer than $36^\circ$
7. $x=8$	8. $w=3$	9. $z=-4$
10. $p=-50$	11. c. 16 ft.	12. a. $\frac{2}{3}$ b. (0, -2) c. Quadrant I
13. (4, -5) is not on the line (see graph on back)	14. a. $81\pi\text{in}^2$ b. $18\pi\text{in.}$	15. $24\text{ft}^3$
16. 0.0001 lb.	17. $x-5y$	18. $3x^2+x$
19. 1	20. $\frac{x^2}{z^2}$	21. 2
22. $2.25 \times 10$ or 22.5	23. a. 0.98 ; $\frac{49}{50}$ b. the fraction $\left( \frac{49}{50} \right) (50,000) = 249,000$	24. $-\frac{1}{2}$
25. $\frac{6y^2}{xz^2}$	26. Yes b/c 10,000g is 10 kg which is about 22 lbs.	27. Sample Space B is more useful because easier to calculate the probabilities. $P(H \text{ and } I) = \frac{1}{4}$
28. $5\frac{1}{4}\text{ft.}$ $5.25\text{ft.}$	29. a. $x=5, -5$ b. $x=3, -3$	30. a. $200\text{in}^3$ b. $220\text{in}^3$

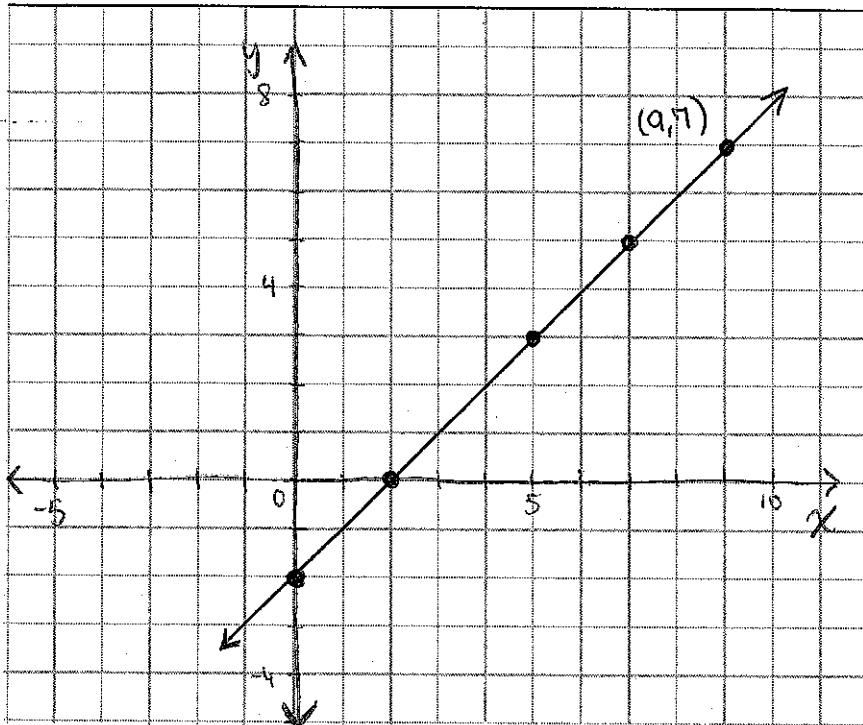
#13

$$y = -x$$



1. 104 stripes	2. $\frac{40 \text{ yds}}{1} \left( \frac{3 \text{ ft}}{1 \text{ yd.}} \right) = 120 \text{ ft}$	3. 14 cups of flour
4. a.  b. range: 3, mean: 4.9, median: 5, c. mode	5. $80^\circ$ b/c the lines are parallel and $\angle 1$ corresponds to the $80^\circ$ angle.	6. $100^\circ$ b/c $\angle 2$ and $\angle 1$ are supplementary so their sum is $180^\circ$
7. $x = 0$	8. $x = 7$	9. $x = 19$
10. $x = \frac{1}{2}$	11. $\frac{1}{y}$	12. a. line a, b. 0, c. line b, d. Quadrant IV
13. (9, 7) is on the line (see graph on back)	14. a. 20 cm, b. $3\frac{1}{4} \text{ cm}^2$ , c. $86 \text{ cm}^2$	15. a. $24 \text{ in}^2$ , b. 30 in
16. $-2x$	17. $x^2 - 3x + 5$	18. $10^9$
19. 0	20. $x$	21. $\frac{3}{4}$
22. $7.62 \times 10^{-1} \text{ m}$	23. a. 1, b. 1	24. a. 10ft : 3in or 40:1, b. 9in
25. 5m	26. $x = 16$	27. $x = 6, -6$
28. $x = 1, -1$	29. $m = 1$	30. 

#13  $y = x - 2$



1. \$8 million	2. 11 minutes	★ 3. Yueling read 5 books that averaged 100 pgs. each. Used the mean because 5 times the mean is the total # of pages read.
4. -4	5. $x=2$	★ 6. $x=75^\circ$
7. $m=7$	8. $x=9$	9. $x=4$
10. $y=5$	11. a. front b. right c. top	12. Both are correct. Rogers is more helpful b/c each outcome listed is equally likely so probabilities can <del>more</del> easily be calculated.
13. about 11,304 mi <sup>2</sup>	14. (5,2) is a solution (see graph on back)	15. $p=32$ ft. $A=42$ ft <sup>2</sup>
★ 16. a. 40 mph b. 2.5 hr.	★ 17. $440 \text{ ft} \left( \frac{1 \text{ yd}}{3 \text{ ft}} \right) = 146 \frac{2}{3} \text{ yd}$	18. 13,200 in <sup>3</sup> about 54 breaths
★ 19. $\frac{1}{81}$	20. $x^4 m$	21. $\frac{1}{6}$
22. 24	23. a. 0.01, 1% b. $\frac{1}{100}$ is greater	24. a. $3(2x-5)$ b. $x(x-1)$
25. a. 3 b. $x=18$	26. $1\frac{3}{10}$ min, 1.3 min	27. Rahm loses 115 points.
28. 100 human hairs are $2\frac{1}{2}$ times as thick as a nickel.	★ 29. a. $3x+3b$ b. $-x+5$	30. Graph A. the relationship is not proportional.



④  $y = \frac{4}{5}x - 2$

