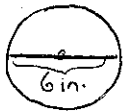
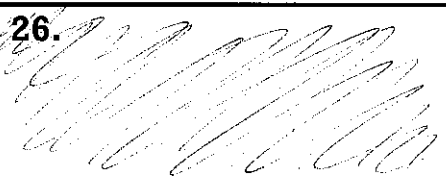
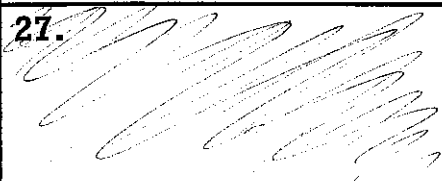
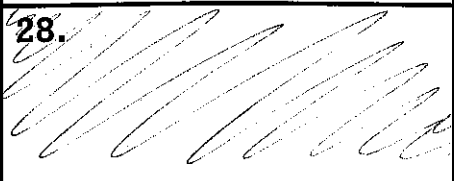
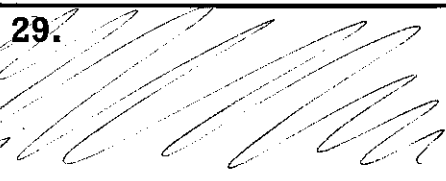
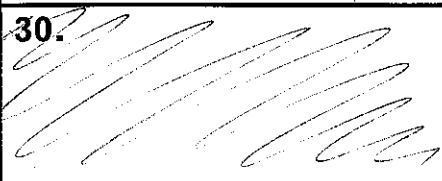

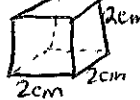
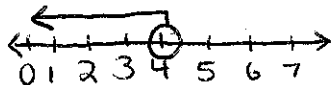
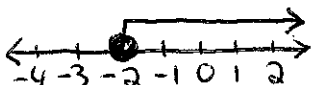

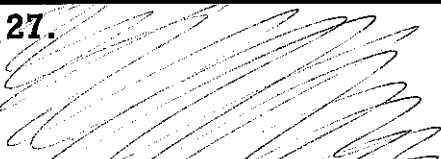
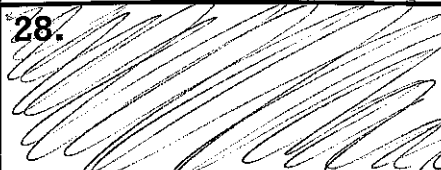
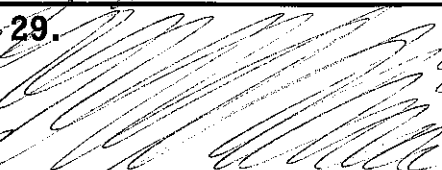
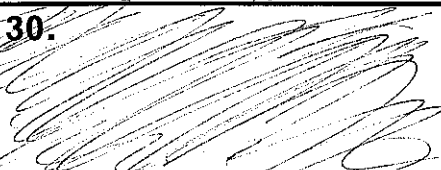
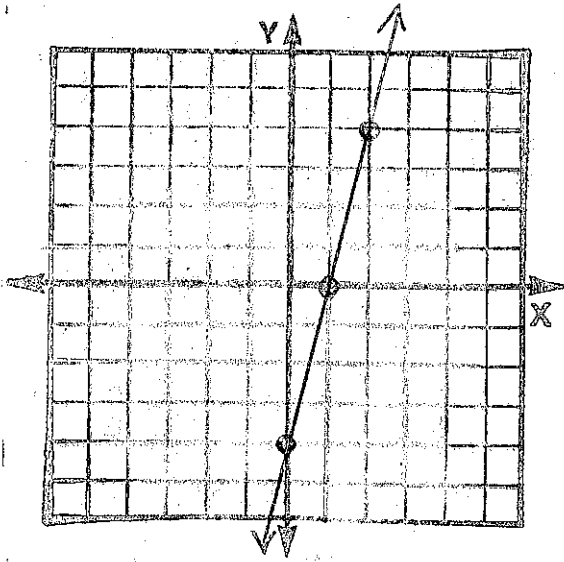


1. 77,000 pairs of white shoes	2. \$213	3. \$167
4. Mean: 60 Median: 56 Mode: 56	5. $m\angle x = 108^\circ$	★ 6. Substitute -4 for x and -1 for y and check if the resulting statement is true.
7. 1,440 ft ² (lateral surface area)	8. a. 28.26 in ² b. 18.84 in 	9. scale factor: $\frac{3}{2}$ or 1.5 m = 4.5
★ 10. $x = 0.5$	★ 11. $x = 445$	★ 12. $x = 6$
★ 13. $x = 5$	14. $x = \frac{5}{3}$ or $x = 1\frac{2}{3}$	15. $x = 5$
★ 16. Unit rate: $\frac{2.5 \text{ in}}{\text{yr}}$	★ 17. $54 \text{ in} \left(\frac{1 \text{ ft}}{12 \text{ in}} \right) = 4.5 \text{ ft}$	18. $x^2 + 5x + 5$
19. a. 0.17; 17% b. 17% of the customers registered for the discount card.	★ 20. a. $y = x - 1$ b. $y = \frac{3}{4}x - 3$	21. 16 inches
22. $-6\frac{1}{3}$	23. $\frac{u}{t}$	24. 108
25. D.	26. 	27. 
28. 	29. 	30. 

<p>1. 72 inches</p>	<p>★ 2. 27 castles not preserved</p>	<p>3. a.  1cm 1cm 1cm b.  2cm 2cm 2cm c. 8cm^3; 8 smaller cubes would fit in the larger</p>
<p>4. mean: 303 feet median: 303 feet mode: 310 feet</p>	<p>5. $x = 135^\circ$</p>	<p>6. (graph on back) NO, $(-2, -4)$ is not on the line.</p>
<p>7. The smaller wheel turns twice.</p>	<p>★ 8. a. 18 yd² 22 yd b. trapezoid</p>	<p>9. 10m/sec.</p>
<p>10. $300\text{min} \left(\frac{1\text{hr.}}{60\text{min}} \right) = 5\text{hr.}$</p>	<p>11. a. {BB, BR, BW, RB, RR, RW, WB, WR, WW} b. $\frac{1}{3}$</p>	<p>12. a. 1.25 b. $1\frac{1}{4}$</p>
<p>13. A 10 ft. board is long enough. (120 inches) The hypotenuse (diagonal) is less than 116 inches.</p>	<p>★ 14. 0</p>	<p>15. 2e</p>
<p>16. 0</p>	<p>17. $x^2 - 4$</p>	<p>★ 18. $x = 1$</p>
<p>★ 19. $x = 1010$</p>	<p>★ 20. $x = -3$</p>	<p>21. $x = \frac{3}{4}$</p>
<p>22. a. $y = \frac{1}{2}x - 1$ b. $y = -2x + 4$</p>	<p>★ 23. $x < 4$ </p>	<p>★ 24. $x \geq -2$ </p>
<p>25. a. (graph on back) b. A'(-8,8) B'(8,8) C'(8,-8) D'(-8,-8)</p>	<p>26. </p>	<p>27. </p>
<p>28. </p>	<p>29. </p>	<p>30. </p>

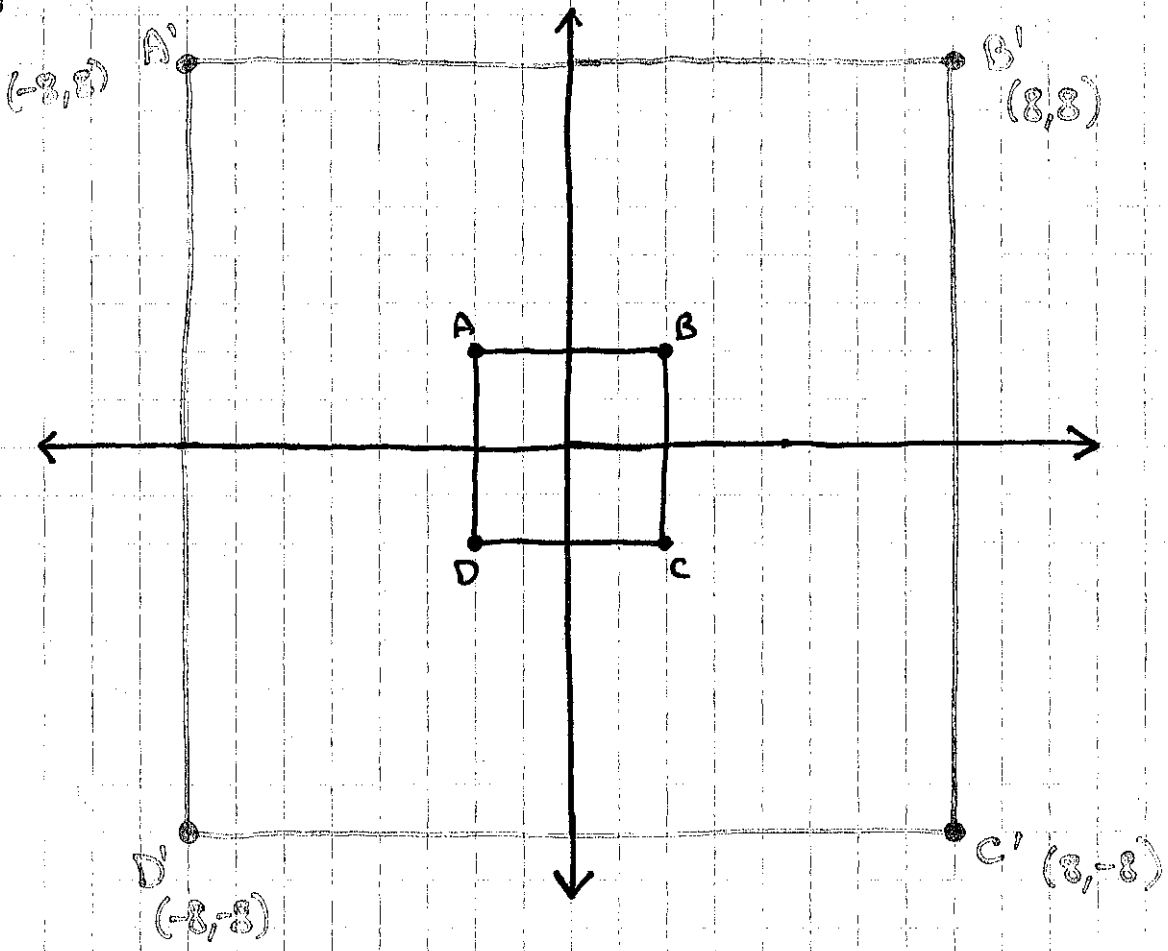
#6

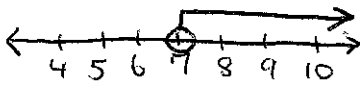


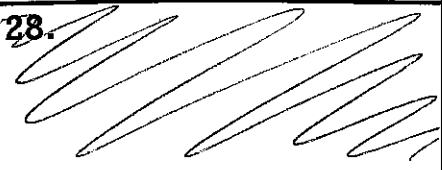
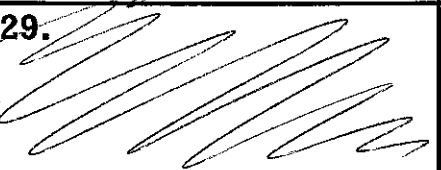



$$y = 4x - 4$$

NO, $(-2, -4)$ is not on the line.

#25

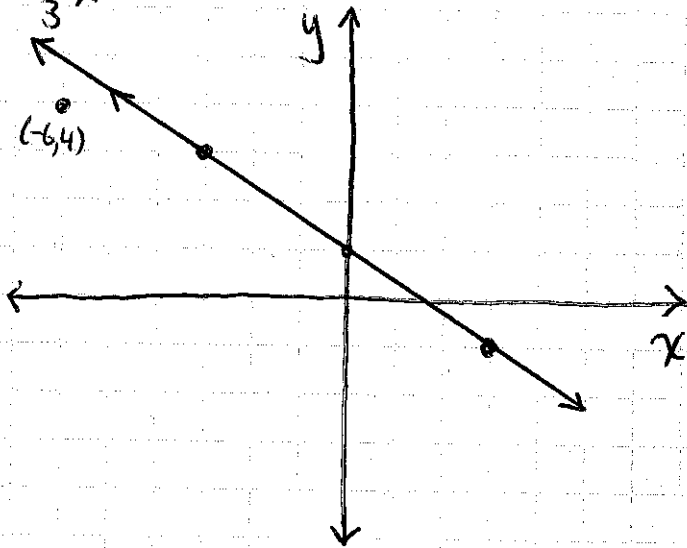



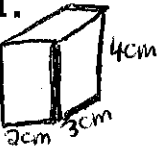
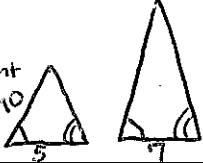
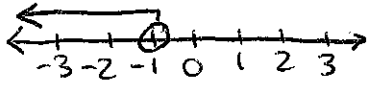

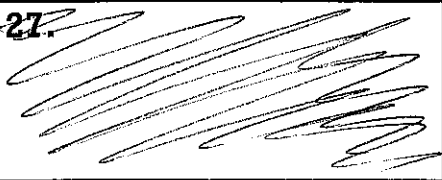
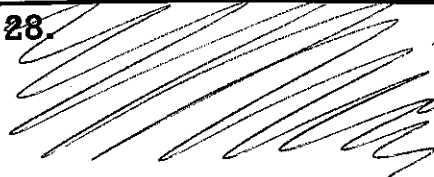
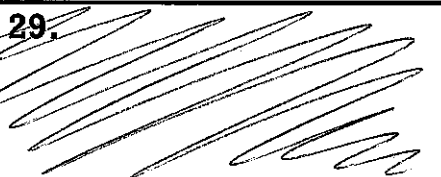

1. 18 vases	2. 560 students	3. 15 dimes
4. a. mean: 2.6 median: 3.0 mode: 1.8 range: 1.8 b. median because it is the greatest of the measures.	5. L 7	6. (graph on back) NO, (-6, 4) is not a solution.
★ 7. a. $\frac{5}{6}$, $0.8\bar{3}$ b. 0.83	★ 8. a. $0.\bar{4}$, $44\frac{4}{9}\%$ or $44.\bar{4}\%$ b. 0.444	9. a. $\{R, R_2, R, W, R, B, R_2 W, R_2 B, W B\}$ b. $\frac{5}{6}$ c. "no red marbles" or "white and blue" → $\frac{1}{6}$
★ 10. 21 inches	11. 96 in^2	★ 12. a. 157 ft^2 b. 31.4 ft.
13. <u>1 math problem</u> min	14. $2460 \text{ in.} \cdot \left(\frac{1 \text{ ft}}{12 \text{ in.}}\right) = 205 \text{ ft.}$	★ 15. a. $7(m^2 - 7)$ b. $x^3(x - 4)$
16. -3	17. 4c	18. $\frac{5}{6}$
19. 0.02	★ 20. $x = 45$	★ 21. $x = -2$
22. $x = 10$	23. $x = 4, -4$	24. $x > 7$ 
25. C.	26. 	27. 
28. 	29. 	30. 

#6

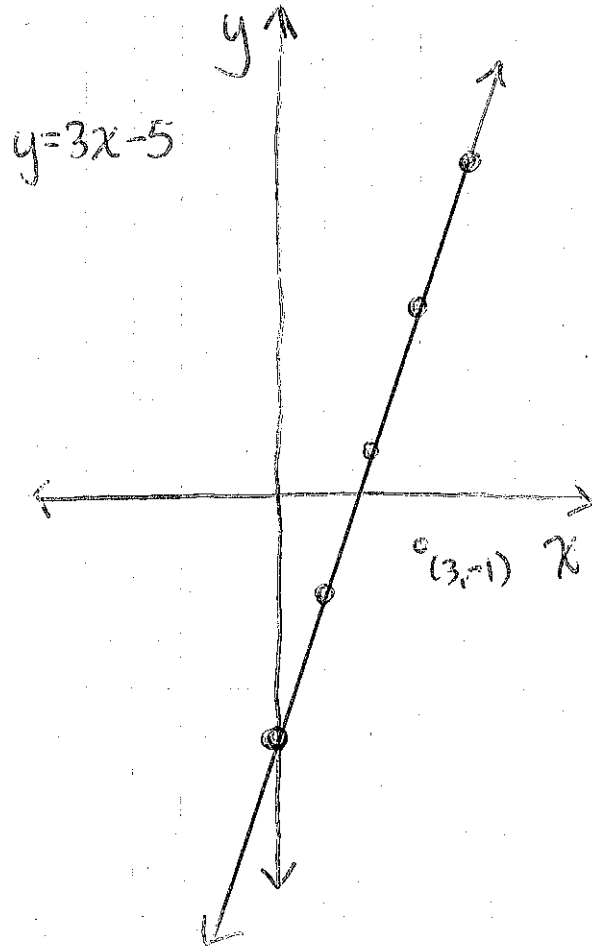
$$y = -\frac{2}{3}x + 1$$

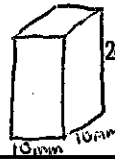
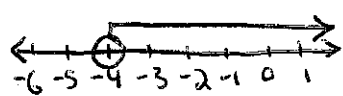
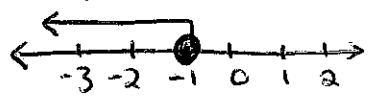
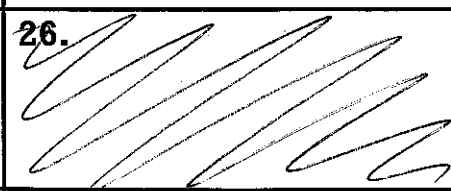

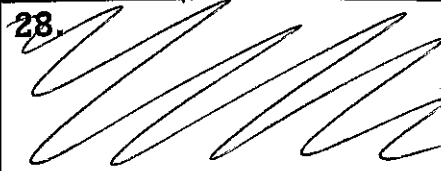


$(-6, 4)$



1. \star 30 students	2. 120 students	3. 7 quarters
4. (a) mean = 15oz. median = 16oz. mode = 16oz range = 8oz. (b) range	5. \star $m = 74^\circ$	6. triangular prism 
7. (Graph on back) \star No, (3, -1) is not a solution.	8. \star a. $\{H_1, H_2, H_3, H_4, H_5, H_6, T_1, T_2, T_3, T_4, T_5, T_6\}$ b. $\frac{3}{12} = \left(\frac{1}{4}\right)$	9. \star $\frac{1200 \text{ ft}}{\text{min}} \left(\frac{1 \text{ min}}{60 \text{ sec}}\right) = 20 \text{ ft/sec}$
10. \star $\frac{0.3 \text{ tons} \left(\frac{2000 \text{ lbs.}}{1 \text{ ton}}\right)}{\text{day}} = \frac{600 \text{ lbs.}}{\text{day}}$	11. \star  b. 24 cm^3 c. 52 cm^2	12. \star a. $\frac{7}{9}$, $0.\bar{7}$ b. 0.778
13. \star $3\frac{3}{4}$	14. \star a. 22 cm b. 38.5 cm^2 (or $38\frac{1}{2} \text{ cm}^2$)	15. \star a. 74 ft^2 b. 44 ft.
16. a. $-3(x-9)$ b. $10(x-10)$	17. \star a. corresponding angles are congruent b. $\frac{7}{5}$ or 1.4 c. $x = 4$ 	18. -10
19. \star $\frac{be}{ac}$	20. $x = 11$	21. $x = 26$
22. $x = 20$	23. \star $x = 100$	24. $x < -1$ 
25. \star a. 18.5 inches b. June	26. 	27. 
28. 	29. 	30. 

#7



1. 60 cans of chili	2. 12 people	3. 50 minutes
4. mean: 6.99g median: 6.98g mode: 6.98g	5. $m\angle x = 60^\circ$	6. a.  b. 1000 mm ² c. The prism because the pyramid can fit inside the prism with space leftover.
7. (graph on back) (3, -6) is not a solution.	8. a. {land 2, land 3, 2 and 3} b. $\frac{2}{3}$	9. 25 ft.
10. 28.56 cm	11. $\frac{90m}{min} \left(\frac{1min}{60sec} \right) = 1.5m/sec$	12. $\left(\frac{1.2ft}{sec} \right) \left(\frac{12in}{1ft} \right) = 14.4 in/sec$
13. a. $4(y-8)$ b. $2x(x-8)$	14. a. $\frac{1}{30}, 0.0\bar{3}$ b. Fraction	15. 0.4375 43.75% or $43\frac{3}{4}\%$
16. 60%	17. 0	18. $\frac{x^2}{z^2}$
19. $\frac{5}{12}$	20. 12	21. $x = 14$
22. $x = \frac{3}{7}$	23. $x > -4$ 	24. $x \leq -1$ 
25. No, the relationship is not proportional. For longer distances (highway driving) you get better fuel efficiency.	26. 	27. 
28. 	29. 	30. 



#7

