

## **NYS Math 7 2006 Answer Key**

### **Multiple Choice**

- 1) D
- 2) F
- 3) C
- 4) J
- 5) C
- 6) J
- 7) C
- 8) H
- 9) B
- 10) H
- 11) B
- 12) J
- 13) B
- 14) F
- 15) B
- 16) J
- 17) B
- 18) J
- 19) B
- 20) J
- 21) C
- 22) H
- 23) A
- 24) H
- 25) D
- 26) H
- 27) B
- 28) H
- 29) B
- 30) G
  
- 31) Bar Graph  
A bar graph is the best display because it shows a visual comparison of data.
  
- 32)  $V = \pi r^2 h$   
 $V = \pi (7)^2 (15)$   
 $V = 735\pi$   
 $V = 2309.0706\dots$  Answer: 2309.1 cubic centimeters

- 33) Part A:  $48+138+77+250+126=639$   
 $\$15,336 \div 639 = 24$   
 Answer: \$24

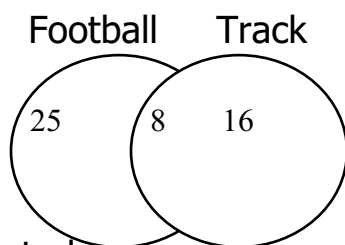
Part B:  $48 \times 24 = \$1152$   
 $250 \times 24 = \$6000$   
 $6000 - 1152 = 4848$   
 Answer: \$4,848

- 34) Work:  $.15 \times 360 = 54^\circ$   
 $.20 \times 360 = 72^\circ$   
 $.55 \times 360 = 198^\circ$   
 $.10 \times 360 = \underline{36^\circ}$   
 $360^\circ$

- 35)  $3620 \text{ g} = 3.62 \text{ kg}$   
 $31.75 - 3.62 = 28.13$   
 Answer: 28.13 kilograms

- 36)  $SA = 2wl + slh + 2wh$   
 $SA = 2(3)(3) + 2(3)(2) + 2(3)(2)$   
 $SA = 18 + 12 + 12$   
 Answer: 42 Square Feet

- 37) Students in Football and Track at Farrell Middle School



Answer: 49 students

- 38) Answer: between 1940 and 1960

The years are going up by 20 at a time. The pattern for the population increases per 20 years is .5 million, .5 million, .7 million, .5 million, .5 million. I predict that from the year 2000 to the year 2020 the population will increase to 3.5 million based on the pattern. (3.3 million is also acceptable as long as the explanation fits)