

$$M_5 = \frac{\sum_5}{5}$$

$$6'2'' = \frac{5'8'' + 6'0'' + 6'5'' + 6'6'' + x}{5}$$

$$30'10'' = 23'19'' + x$$

$$7' - 9'' = x$$

$$6'3'' = x$$

## Orientation Exercises Z

$$\begin{array}{l} 3 \text{ min} \quad 15 \text{ min} \\ \downarrow \quad \quad \downarrow \\ 3.25 + .45x = 10 \\ .45x = 6.75 \\ x = 15 \end{array}$$

1. The average height of 5 basketball players at South High School is 6 feet 2 inches. If four of these players have heights of 5' 8", 6' 0", 6' 5", and 6' 6", how tall is the fifth player?

- A. 5'10"                      D. 6'2"  
 B. 5'11"                      **E. 6'3"**  
 C. 6'1"

2. There are 6 blue, 8 green, 5 red, and 10 yellow marbles in a bag. If a marble is picked from the bag at random, what is the probability that it will be green or red?

- A.  $\frac{1}{2}$                               D.  $\frac{2}{14}$   
 B.  $\frac{14}{29}$                             E.  $\frac{1}{2}$   
 C.  $\frac{13}{29}$                             **Prob(g or r) =  $\frac{8+5}{6+8+5+10} = \frac{13}{29}$**

3. Wendy bought a wallet for \$16.99, a key case for \$10.95, and a duffel bag for \$15.99. Including a sales tax of 5%, what was the total bill?

- A. \$36.13                      **D. \$46.13**  
 B. \$41.73                      E. \$48.23  
 C. \$43.93                      **Cost = (16.99 + 10.95 + 15.99)(1.05)**

4. When the bus fare increased from 50¢ to 60¢, it represented a percent increase of

- $\frac{10}{50}$   
 A. 10%                              D. 30%  
 B.  $16\frac{2}{3}\%$                         E.  $83\frac{1}{3}\%$   
**C. 20%**

5. During a sale of computers, one-fourth of the inventory was sold the first day. The next day two-thirds of the remaining inventory was sold. What percent of the total inventory was sold during the second day?

- A.  $8\frac{1}{3}\%$                             **D. 50%**  
 B.  $16\frac{2}{3}\%$                         E.  $66\frac{2}{3}\%$   
 C. 25%

$$\text{Remains} = \frac{3}{4} \left( \frac{2}{3} \right) = \frac{6}{12}$$

6. A long distance telephone call from Center City to Smithville costs \$3.25 for the first 3 minutes and \$0.45 for each additional minute. How many minutes can a person talk if the cost of the call is to be \$10.00?

- A. 15                              **D. 18**  
 B. 16                              E. 19  
 C. 17

7. Charles earns \$98 in 2 days. At the same rate of pay, how much will he earn in 5 days?

- A. \$196                            D. \$294                             $\frac{598}{2 \text{ day}} = \frac{x}{5 \text{ days}}$   
 B. \$235                            E. None of the above  
**C. \$245**                             $\frac{490}{2} = x$

8. The Lane family drove 150 miles in 3 hours. Traveling at the same speed, how long will it take them to go an additional 250 miles?

- A. 4 hours                            D. 6 hours                             $\frac{150 \text{ mi}}{3 \text{ hr}} = \frac{250 \text{ mi}}{x}$   
**B. 5 hours**                            E. 8 hours                             $150x = 750$   
 C.  $5\frac{1}{2}$  hours                             $x = 5$

9. An iPod sold for \$300, which was 200% of the actual cost. What was the actual cost?

- A. \$150**                              D. \$500                               $300 = 2x$   
 B. \$450                              E. \$600  
 C. \$350

10. The probability of an event occurring is 21%. What is the probability of the event not occurring?

- A. 89%                              D. 0.47%  
 B. 12%                              E. 99%  
**C. 79%**