## Quiz: 020

Directions: Choose the correct multiple-choice answ er. Show your work and any sketches youfeel would be helpful in working the problems.

1) Calculate the problem and choose the correct answ er in scientific notation. ( $\mathrm{N}-\mathrm{I}$ )

$$
\left(6.28 \times 10^{-3}\right)\left(2.05 \times 10^{4}\right)
$$

A. $12.874 \times 10^{1}$
B. $1.2874 \times 10^{2}$
C. $1.2874 \times 10^{-7}$
D. $1.2874 \times 10^{-1}$
2) A bag contains 20 candy coated chocolate pieces: 3 red, 4 blue, 6 green and 7 yellow . One piece of candy is randomly selected from the bag. A second piece is then randomly selected after the first piece is replaced. What is the probability that both pieces selected are blue? ( $\mathrm{D}-\mathrm{J}$ )
A. $\frac{1}{10}$
B. $\frac{3}{100}$
C. $\frac{3}{95}$
D. $\frac{1}{25}$
3) At 1 pm the peak of the post office roof casts an 8 -foot shadow. At the same time, a 7 -foot sign casts a 2 -foot shadow. How high is the peak of the roof? ( $M-D$ )
A. $2 \frac{1}{2}$ feet
B. 28 feet
C. 14 feet
D. $7 \frac{1}{2}$ feet
4) If Point $C=(3,2)$ and $D=(-1,4)$, what is the slope of $\overline{C D}$ ? ( $P-J)$
A. $-\frac{1}{2}$
B. -2
C. $\frac{1}{2}$
D. 2
$\qquad$
$\qquad$

## Quiz: 020 (continued)

5) Rectangle ABCD is similar to rectangle PQRS. What is the perimeter of rectangle PQRS?
( $\mathrm{G}-\mathrm{B}$ )
A. 12
B. 16
C. 24
D. 32

6) From the graph of the linear system, choose the most accurate description. ( $\mathrm{P}-\mathrm{H}$ )
A. intersecting lines
B. parallel lines
C. same line
D. lines are in different planes

7) A computer is on sale for $15 \%$ off. Which statement represents the problem situation?
A. The sale price is $85 \%$ of the original price.
B. The sale price is $115 \%$ of the original price.
C. The sale price is $15 \%$ of the original price.
D. The sale price is $65 \%$ of the original price.
8) The length and width of Rectangle $A$ is doubled to form Rectangle $B$. Sarah concluded that the area of Rectangle $B$ is tw ice the area of Rectangle $A$.

Is she correct? $\qquad$ Justify your answer. ( $\mathrm{G}-\mathrm{H}$ )

