**Proficiency Test Information**

**QR 101 – QUANTITATIVE REASONING**

**Sample Questions**

The questions below are typical of the type asked on the proficiency exam.

1. The price of a movie ticket increased from $10 to $12. This means the new price is
2. 20% of the old price
3. 80% of the old price
4. 120% of the old price
5. 102% of the old price
6. You are remodeling your rectangular living room and want to install wood flooring. The wood you selected is on sale this week for $5.89 per square foot, including the installation charge. You measure your living room and find it is 7 yards by 4 yards. How much will it cost for the new flooring?

a. approximately $1,500

b. approximately $500

c. approximately $1,000

d. approximately $10,000

1. Assume Clarence has a job that pays $20 per hour and he typically works an 8-hour day. After taking into account weekends and holidays, Clarence is paid for approximately 260 days per year. At this rate, how long will it take Clarence to have earned a total of $3 million?

a. Clarence will never reach this amount

b. just over 72 years

c. just under 50 years

d. about 35 years

1. If a pound of tomatoes costs $2.54 in the United States, what would be the price of tomatoes in England, stated in Euros per kilogram.

Assume that 1 US Dollar = 0.735455 Euros and that 1 kg = 2.205 pounds.

a. 1.57 Euros per kilogram

b. 0.85 Euros per kilogram

c. 7.62 Euros per kilogram

d. 4.12 Euros per kilogram

1. A box of candy contains five dark chocolates and five white chocolates. If you pick randomly and eat each candy after choosing it, what is the probability of choosing three dark chocolates in a row?

a. $\frac{1}{8}=0.125$

b. $\frac{1}{12}≈0.083$

c. $\frac{3}{50}=0.060$

d. $\frac{25}{144}≈0.174$

Answers and Explanations

1. C

The price increased by $2, which is 20% of the original price of $10. So the ticket now costs the original amount (100%) plus another 20%, for a total of 120% of the old price.

1. A

Since the flooring it priced in square feet, change the room dimensions to feet. Since there are three feet in a yard, 7 yards by 4 yards is equal to 21 feet by 12 feet, for an area of 252 square feet. Multiply by the cost per square foot.

1. B

Clarence earns $20 X 8 or $160 per day. If he works 260 days a year, he earns $160 X 260 or $41,600 per year. $3 million ÷$41,600 per year ≈ 72 years

1. D

$$\frac{\$2.54}{1 lb}×\frac{2.205 lb}{1 kg}×\frac{0.735455 Euro}{\$1}≈\frac{4.12 Euro}{kg}$$

1. B

Since you eat the chocolate, there will be one fewer chocolate in the box each time as well as one fewer dark chocolate.

 $\frac{5}{10}×\frac{4}{9}×\frac{3}{8}=\frac{1}{12}$