

- 3) The following table shows how many customers bought certain brands of tires at an auto store during a 3-month period of time. Use the table to answer questions 1-3.

Tire Sales, January-March

Brand	Number Sold
X	450
Y	210
Z	600
XX	240
Total	1,500

If the auto store has about 8,000 customers a year, what is a good prediction for the number of customers that will buy

→ Brand Z tires?

- A 4,800  
B. 3,200  
C 2,500  
D 1,700

$$\frac{600}{1500} = \frac{2}{5}$$

$$\frac{2}{5} \cdot \frac{8000}{1} = 3,200$$

- 5) The following cubes are placed in a bag: 3 yellow, 3 blue, and 5 red, and 4 green. What is the probability of choosing a blue cube?

*Total 15*

$$\frac{3}{15} = \frac{1}{5}, \cdot 20 = 20\%$$

Theoretical Probability

6)

*	*	*	*	*	*
2	4	6	8	10	12

Tot:

Experimental Probability

What is the experimental probability of rolling a factor of 24?

$$\frac{20}{24} = \frac{5}{6}$$

Factor tree for 24: 24 → 12, 2 → 3, 4 → 1, 2

Division: 24 ÷ 2 = 12, 12 ÷ 2 = 6, 6 ÷ 2 = 3, 3 ÷ 3 = 1

- 4) At the end of the year, the auto store owner ordered 2,000 new tires for the store, based on the number of tires sold. What is a good prediction for how many Brand XX tires the store owner would order?

- A 650  
B 500  
C 480  
D. 320

$$\frac{240}{1500} = \frac{24 \div 3}{150 \div 3} = \frac{8}{50}$$

$$\frac{8}{50} \cdot \frac{2000}{1} = 320$$