EXTENDED LEARNING

1. During a season, if the Houston Texans kicker attempted 19 field goals and he made 15 of the field goal attempts, what proportion can be used to calculate the percent of the successful field goals by the kicker?

$$\frac{\text{Successful field goals}}{\text{Total field goals}} \quad \frac{15}{19} = \frac{x}{100}$$

2. On an average gameday, the concession stands sell hot dogs, popcorn, hamburgers, and chicken finger baskets. Hot dogs are the best-selling concession stand food and are 40% of the total number of food items sold each game. On average, the concession stands sell 7,000 hot dogs each game. How many total food items are sold each game?

$$\frac{40}{100} = \frac{7000 \text{ hotdogs}}{x \text{ food items}} \qquad \frac{40}{100} \div \frac{20}{20} = \frac{2}{5} \qquad \frac{2}{5} \overset{x3500}{\underset{x3500}{=}} \frac{7000 \text{ hotdogs}}{x \text{ food items}}$$

$$x = 17,500 \text{ food items}$$

3. NRG Stadium can seat 72,000 fans at Texans home games. Half of the fans wear mostly blue, 25% wear mostly red, 0.2 wear mostly white, and the rest wear other colors. On average, how many fans are wearing other colors?

50% + 25% + 20% + x = 100%

$$\overset{\times 720}{\overbrace{\dfrac{5}{100}}} = \dfrac{x \text{ fans}}{72{,}000 \text{ fans}} \underset{\times 3500}{}$$

x = 5% or 0.05 x 72,000 = 3,600 fans

There are 3,600 fans on average wearing other colors

4. In 2011 the Houston Texans went to the playoffs for the first time in franchise history. During that season, the Texans' home record was 5 wins and 3 losses. What percentage of their home games did they win?

5 wins + 3 losses = 8 home games   5/8 = 62.5%

ENRICHMENT

The Final Individual Statistics from each Stats Report includes the total number of yards each player gained by rushing or pass receiving. Choose a Stats Report. What percent of the total yards gained by the Houston Texans were earned through receiving a pass?

#TexansStatsChallenge