



PERCENTAGES

ANSWER KEY

EXTENDED LEARNING

1. In 2019, Houston Texans kicker Ka’imi Fairbairn attempted 25 field goals. He made 20 of the field goals. What proportion can be used to calculate the percent of the successful field goals by Fairbairn?

$$\frac{\text{successful field goals}}{\text{total field goals}} = \frac{20}{25} = \frac{x}{100}$$

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?

$$\frac{40}{100} = \frac{7000 \text{ hotdogs}}{x \text{ food items}}$$

$$\frac{40}{100} \div \frac{20}{20} = \frac{2}{5}$$

$$\frac{2}{5} = \frac{7000 \text{ hotdogs}}{x \text{ food items}}$$

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



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3. During a typical Texans home game, there are 72,000 fans in attendance. 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?

$$50\% + 25\% + 20\% + x = 100\% \quad x = 5\% \quad \text{or} \quad 0.05 \times 72,000 = 3,600 \text{ fans}$$

$$\frac{5}{100} = \frac{x \text{ fans}}{72,000 \text{ fans}}$$

x 720 (above the fraction) and x 720 (below the fraction)

There are 3,600 fans on average wearing other colors.

4. The Houston Texans home game record in 2019 was 10 wins and 6 losses. What percentage of their home games did they win?

$$10 \text{ wins} + 6 \text{ losses} = 16 \text{ games games} \quad \frac{10 \text{ wins}}{16 \text{ games}} = \frac{5}{8} = 62.5\%$$

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?