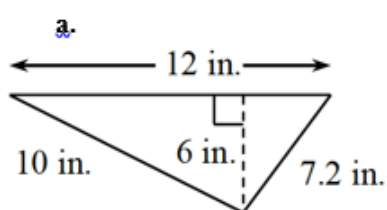
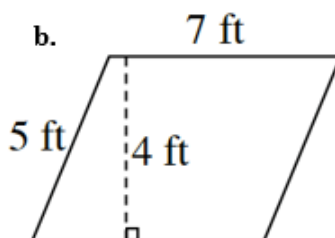


Can I change fractions to percents?

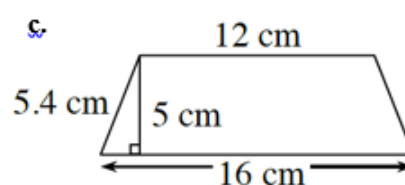
Find the perimeter and area of each figure below.



$$36 \text{ in}^2$$



$$28 \text{ ft}^2$$



$$70 \text{ cm}^2$$

After 25 flips of a fair coin, Lorraine and her partner recorded 14 heads ($\frac{14}{25}$ heads).

- a. Is this more than, less than, or equal to 50%, the theoretical probability of flipping heads? Talk with your partner about how you know.
- b. Percentages are one way to compare different portions of the total. If you have not already done so, work with your partner to calculate what percentage of Lorraine's flips were heads. Be prepared to share your strategy for finding the percentage with the class.



Three students invented a game in which they flip coins for one minute and then determine who flipped the highest percentage of heads. After their first round, each of them thinks that he or she was the winner of the game. Here is what they reported:

- *“I think I won,”* said Maria, *“Of my flips, $\frac{12}{25}$ were heads.”*
- Autymn said, *“I flipped my coin 40 times and had a total of 18 heads. Since both of my numbers are larger than yours, I must have won.”*
- Kumar reported, *“I recorded 44% of my flips as heads.”*

Help the students determine their percentage of heads. Justify your answer.

Change the fractions to percents using a strategy of your choice.

a. $\frac{13}{20}$

65%

b. $\frac{7}{10}$

70%

c. $\frac{12}{25}$

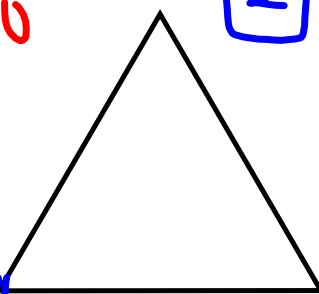
48%

d. $\frac{9}{30}$

30%

$$\frac{9}{30} \times 100 = \frac{900}{3000} = 30\%$$

$$\frac{9}{30} \quad 30 \overline{) 9.0} \quad \begin{array}{r} 0.3 \\ - 90 \\ \hline 0 \end{array}$$

$$\frac{5}{10} \cdot \boxed{\frac{20}{20}} = \frac{40}{100}$$
$$\frac{2}{5} \cdot \boxed{\frac{20}{20}} = \frac{4}{10} \quad \boxed{\frac{4}{10}} = \frac{40}{100}$$


40%

0.4