Ratios and Proportions 2
Geometry

Write each ratio in lowest terms.

1) 15 to 3 2) 12:6 3) $\dfrac{24}{14}$ 4) 36 passes to 15 fails

5) 27: 81 6) 45 touchdowns to 10 interceptions 7) $\dfrac{18}{21}$ 8) 49: 539

Use the table of information at the right to answer the following questions by giving a ratio in lowest terms.

9) French to Swiss?

10) Dutch to German?

11) English to Polish?

12) Italian to German?

13) Swiss to Italian?

The distribution below represents people of different nationalities employed by a European business:

Dutch: 10
English: 28
French: 32
German: 45
Italian: 25
Polish: 4
Swiss: 24

In 14 - 17, use two different methods to show whether the following ratios are proportional or not.

14) $\dfrac{16}{20}$ and $\dfrac{48}{56}$

15) $\dfrac{14}{8}$ and $\dfrac{84}{48}$

16) $\dfrac{28}{63}$ and $\dfrac{44}{99}$

17) $\dfrac{42}{49}$ and $\dfrac{84}{96}$

In 18 - 21, solve each proportion for the missing value.

18) $\dfrac{12}{7} = \dfrac{x}{42}$

19) $\dfrac{6}{15} = \dfrac{20}{t}$

20) $\dfrac{13}{27} = \dfrac{52}{v}$

21) $\dfrac{8}{11} = \dfrac{x}{154}$

The ratio of youngsters taking tap compared to the number taking gymnastics at a local dance academy is 3 to 7.

22) If there are 49 young gymnasts enrolled, how many students are tap dancing?

23) What is the smallest possible number of total gymnasts and tap dancers enrolled at the school?

24) Thirty tap dancers enrolled for next year. If the ratios remain the same, how many gymnasts are enrolled?

A CEO allots funds to his marketing and product development departments in a ratio of 2:9, respectively.

25) If the CEO allots $20,000 to his marketing department, what does he allot to his development department?

26) If the CEO allots $203,184 to his development department, what is the allotment for marketing?

27) Given the budgets in #26, what is the total budget for both departments?