

Using Percent to Compare Two Numbers

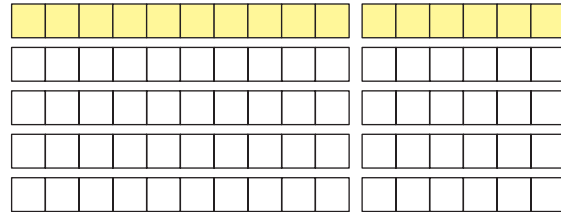
Comparing Two Numbers Using Percent

To find what percent a part is of a base, divide the part by the base.

16 is 20% or $\frac{1}{5}$ of 80

Example:

Part $\rightarrow \frac{16}{80} = 0.2 = 20\%$
 Base \rightarrow



EXAMPLE 3 Comparing Two Numbers Using Percent

The number of tiles of each letter in SCRABBLE depends on the language. There are 100 letters in the traditional version of SCRABBLE. The distribution of the letters in the English version is shown at the right. In this version, what percent of the letters are vowels?



SOLUTION

There are 9 A's, 12 E's, 9 I's, 8 O's, and 4 U's. That is a total of 42 vowels.

Part $\rightarrow \frac{42 \text{ letters}}{100 \text{ letters}} = 0.42 = 42\%$
 Base \rightarrow

42% of the tiles in the English version of SCRABBLE are vowels.

✓ Checkpoint

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The Spanish version of SCRABBLE has the following tiles.

- 2 blank tiles, 11 A's, 3 B's, 4 C's, 4 D's, 11 E's, 2 F's, 2 G's, 2 H's,
- 6 I's, 2 J's, 1 K, 4 L's, 1 LL, 3 M's, 5 N's, 1 Ñ, 8 O's, 2 P's, 1 Q,
- 4 R's, 1 RR, 7 S's, 4 T's, 6 U's, 2 V's, 1 W, 1 X, 1 Y, and 1 Z

What percent of these tiles are vowels?