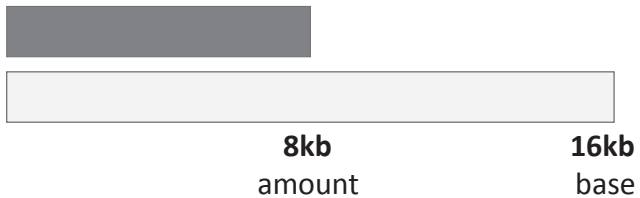


Getting Partial to Percentages: Problems to solve

1. Find the relationships between the bases and the amounts.
Express the relationships as percentage equations.

a. What percentage of 16kb is 8kb?



Complete the equation:

$$\left[\frac{\quad}{100} \right] \times 16 = 8$$

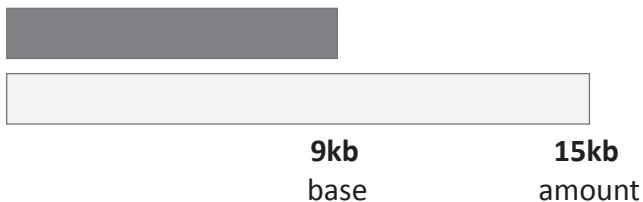
b. What percentage of 16kb is 20kb?



Complete the equation:

$$\left[\frac{\quad}{100} \right] \times 16 = 20$$

c. What percentage of 9kb is 15kb?



Complete the equation:

$$\left[\frac{\quad}{100} \right] \times 9 = 15$$

d. What percentage of 35kb is 56kb?



Complete the equations:

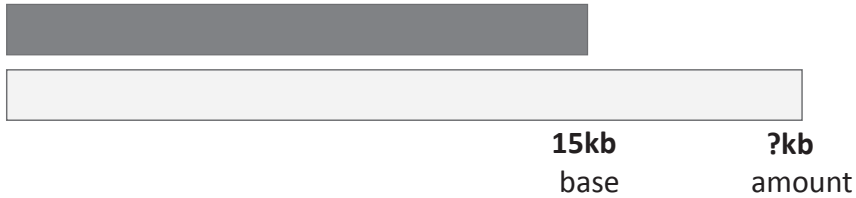
$$\left[\frac{\quad}{100} \right] \times 35 = 56$$

$$\left[\frac{\quad}{1000} \right] \times 35 = 56$$

Getting Partial to Percentages: Problems to solve

2. In the next examples find the amount of the unknown file.

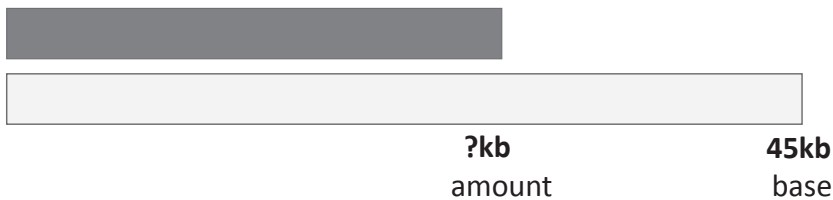
- a. The small file has 15kb. The large file is 133.3 % of the size of the small file. What is the size of the large file?



Complete the equation:

$$\frac{4}{3} \times 15 = [\quad]$$

- b. The small file is 60% of the size of the large file. The large file has 45kb. What is the size of the small file?

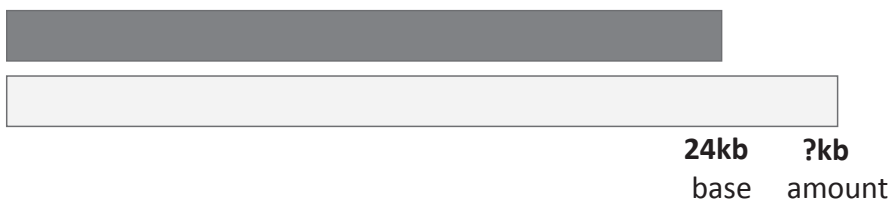


Complete the equations:

$$\frac{60}{100} \times 45 = [\quad]$$

$$\frac{6}{10} \times 45 = [\quad]$$

- c. The small file has 24 kb. The large file is 112.5 % of the size of the small file. What is the size of the large file?

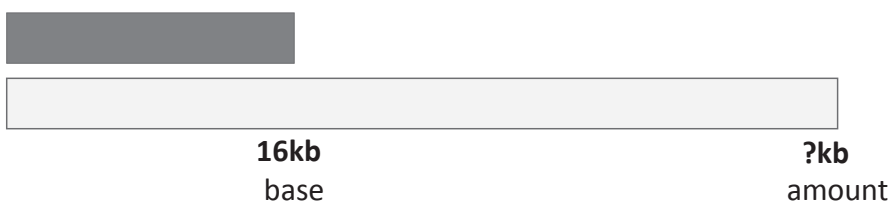


Complete the equations:

$$\frac{112.5}{100} \times 24 = [\quad]$$

$$\frac{1125}{1000} \times 24 = [\quad]$$

- d. The small file has 16 kb. The large file is 250 % of the size of the small file. What is the size of the large file?



Complete the equations:

$$\frac{250}{100} \times 16 = [\quad]$$

$$\frac{25}{10} \times 16 = [\quad]$$

3. Horses eat about 60% of their bodyweight in food each day. If the horse weighs 580 kilograms, how much does it eat each day?



4. Lambing percentage is the relationship between the number of ewes (the base) and the number of lambs that are born (the amount).
- If 225 lambs are born to 150 ewes, what is the lambing percentage?



5. Suppose your Grandfather bought this *Penny Black* stamp in 1980 for \$80. This year it is worth \$450.
- What percentage of the 1980 price is the 'this year' price?

6. 1280 people live in Twizel.
That is a 125% of the population in 2006.
How many people lived in Twizel in 2006?

