

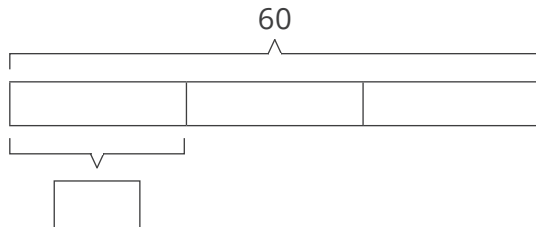
Fractions of Amounts

Fractions & Percentages of Amounts Step 1

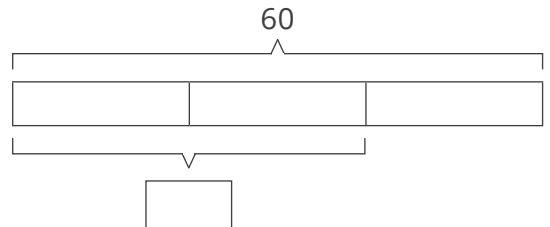
Small Step: Find a fraction of a given amount.

1. Use the diagrams below to find the fractions of the given amounts.

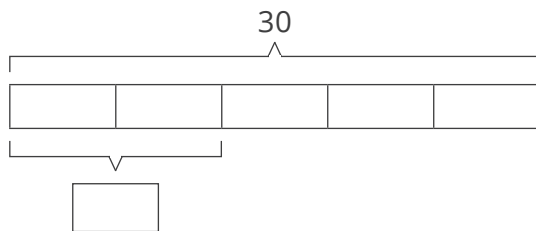
a. $\frac{1}{3}$ of 60 =



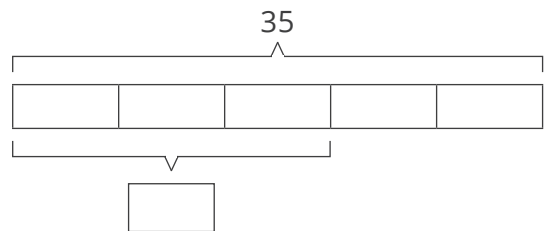
b. $\frac{2}{3}$ of 60 =



c. $\frac{2}{5}$ of 30 =



d. $\frac{3}{5}$ of 35 =



2. Calculate the following fractions of the given amounts.

a. $\frac{1}{4}$ of 24 =

b. $\frac{1}{5}$ of 20 =

c. $\frac{1}{8}$ of 40 =

d. $\frac{1}{12}$ of 48 =

3. Calculate:

a. $\frac{1}{8}$ of 32 =

b. $\frac{3}{8}$ of 32 =

c. $\frac{5}{8}$ of 32 =

d. $\frac{8}{8}$ of 32 =

4. Calculate the following fractions of the given amounts.

a. $\frac{1}{7}$ of 35 =

b. $\frac{3}{5}$ of 45 =

c. $\frac{3}{7}$ of 77 =

d. $\frac{5}{11}$ of 110 =



5. Josie is using a recipe but scaling down the quantities by only using $\frac{3}{5}$ of the amounts listed in her recipe book. If the recipe book says to use 400g of rice and 250g of tomatoes, how much of each ingredient should she use?

6. 112 students in a year group chose to study either French or Spanish. $\frac{3}{8}$ of the students chose French and the remaining $\frac{5}{8}$ chose Spanish.

a. How many students study French?

- b. If 14 students switch from French to Spanish, what fraction of the year group now study Spanish?

7. Harry scored $\frac{8}{11}$ of the available marks in his science test and $\frac{7}{10}$ of the available marks in his maths test. If the maximum number of marks in the science test was 66 and the maths test was out of 80, what were his scores in the two tests?

8. Helen says her football team have won $\frac{2}{5}$ of their games. They have played 10 games and won 7. Is she correct?



Challenge

Anna, Bella and Claire share a chocolate bar. Anna eats $\frac{3}{10}$ of the bar and then gives the rest to Bella. Bella eats $\frac{2}{5}$ of chocolate she is given and gives the rest to Claire. Claire eats $\frac{8}{15}$ of what is left after Anna and Bella have eaten their parts.

If there was 500g of chocolate to begin with, how much chocolate is left?





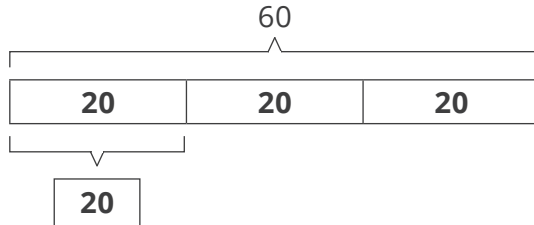
Fractions of Amounts **Answers**

Fractions & Percentages of Amounts Step 1

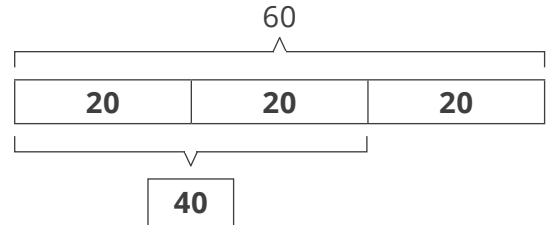
Small Step: Find a fraction of a given amount.

1. Use the diagrams below to find the fractions of the given amounts.

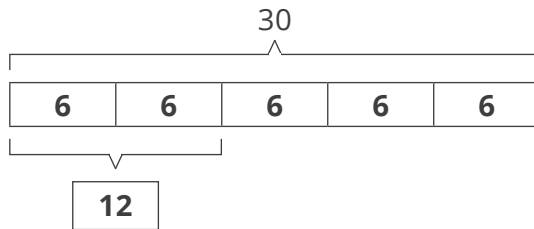
a. $\frac{1}{3}$ of 60 = **20**



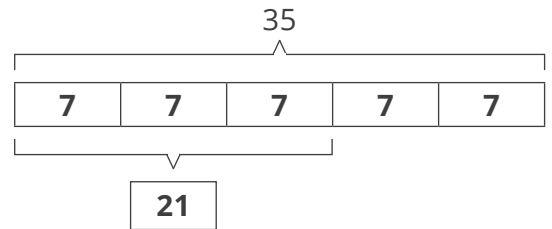
b. $\frac{2}{3}$ of 60 = **40**



c. $\frac{2}{5}$ of 30 = **12**



d. $\frac{3}{5}$ of 35 = **21**



2. Calculate the following fractions of the given amounts.

a. $\frac{1}{4}$ of 24 = **6**

b. $\frac{1}{5}$ of 20 = **4**

c. $\frac{1}{8}$ of 40 = **5**

d. $\frac{1}{12}$ of 48 = **4**

3. Calculate:

a. $\frac{1}{8}$ of 32 = **4**

b. $\frac{3}{8}$ of 32 = **12**

c. $\frac{5}{8}$ of 32 = **20**

d. $\frac{8}{8}$ of 32 = **32**

4. Calculate the following fractions of the given amounts.

a. $\frac{1}{7}$ of 35 = **5**

b. $\frac{3}{5}$ of 45 = **27**

c. $\frac{3}{7}$ of 77 = **33**

d. $\frac{5}{11}$ of 110 = **50**



5. Josie is using a recipe but scaling down the quantities by only using $\frac{3}{5}$ of the amounts listed in her recipe book. If the recipe book says to use 400g of rice and 250g of tomatoes, how much of each ingredient should she use?

$$\frac{3}{5} \text{ of } 400 = 240\text{g of rice}$$

$$\frac{3}{5} \text{ of } 250 = 150\text{g of tomatoes}$$

6. 112 students in a year group chose to study either French or Spanish. $\frac{3}{8}$ of the students chose French and the remaining $\frac{5}{8}$ chose Spanish.

- a. How many students study French?

$$\frac{3}{8} \text{ of } 112 = 42$$

42 students study French.

- b. If 14 students switch from French to Spanish, what fraction of the year group now study Spanish?

$$112 - 42 = 70$$

$$70 + 14 = 84$$

$$\frac{84}{112} = \frac{3}{4}$$

7. Harry scored $\frac{8}{11}$ of the available marks in his science test and $\frac{7}{10}$ of the available marks in his maths test. If the maximum number of marks in the science test was 66 and the maths test was out of 80, what were his scores in the two tests?

$$\text{Science: } \frac{8}{11} \text{ of } 66 = 48$$

$$\text{Maths: } \frac{7}{10} \text{ of } 80 = 56$$

8. Helen says her football team have won $\frac{2}{5}$ of their games. They have played 10 games and won 7. Is she correct?

No, Helen is wrong. $\frac{2}{5}$ of 10 would be 4 games won and her team won 7 games.

**Challenge**

Anna, Bella and Claire share a chocolate bar. Anna eats $\frac{3}{10}$ of the bar and then gives the rest to Bella. Bella eats $\frac{2}{5}$ of chocolate she is given and gives the rest to Claire. Claire eats $\frac{8}{15}$ of what is left after Anna and Bella have eaten their parts.

If there was 500g of chocolate to begin with, how much chocolate is left?

$$\frac{3}{10} \text{ of } 500 = 150\text{g}$$

$$500 - 150 = 350\text{g}$$

$$\frac{2}{5} \text{ of } 350 = 140\text{g}$$

$$350 - 140 = 210\text{g}$$

$$\frac{8}{15} \text{ of } 210 = 112\text{g}$$

$$210 - 112 = 98\text{g left}$$