Fractions - Word Problems
Worksheet 1

Answer each of the following questions without a calculator.
Answer Key & More Worksheets *can be found by scanning the* **QR Code,** *or by clicking on the* RadfordMathematics.com **link in the Header.**
File Name: Answer Key: Fractions - Word Problems - WS 1 - MS

Question 1

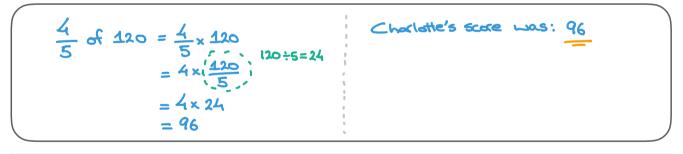A shopping center has 60 cars parked around it, which is $\frac{2}{3}$ of the total number of cars that can park around it.
What is the total number of cars that can park around the shopping center?

Let X be the total number of cars.
Then $\frac{2}{3}$ of $X = 60$, so:

$$\frac{2}{3} \cdot X = 60$$

$$\frac{2X}{3} = 60$$

We now solve:

$$\frac{2X}{3} = 60$$

$\times 3 \qquad \times 3$

$$2X = 3 \times 60$$

$$2X = 180$$

$$2X = 180$$

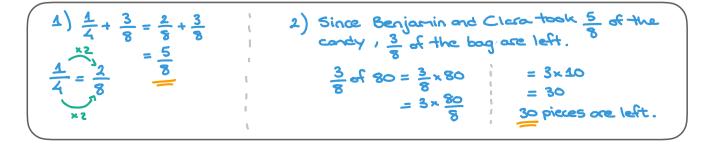$\div 2 \qquad \div 2$

$$X = 90$$

Question 2

The maximum number of points avaialable at a test is 120.
Charlotte obtained $\frac{4}{5}$ of the total number of points available.
What was her score?

$$\frac{4}{5} \text{ of } 120 = \frac{4}{5} \times 120$$

$$= 4 \times \left(\frac{120}{5}\right) \qquad 120 \div 5 = 24$$

$$= 4 \times 24$$

$$= 96$$

Charlotte's score was: 96

Question 3

A bag contains 80 pieces of candy. Benjamin takes $\frac{1}{4}$ of them and Clara takes $\frac{3}{8}$.

1. What fraction of candy was taken from the bag?
2. How many pieces of candy are left in the bag?

1) $\frac{1}{4} + \frac{3}{8} = \frac{2}{8} + \frac{3}{8}$

$$= \frac{5}{8}$$

$$\frac{1}{4} = \frac{2}{8} \quad (\times 2)$$

2) Since Benjamin and Clara took $\frac{5}{8}$ of the candy, $\frac{3}{8}$ of the bag are left.

$$\frac{3}{8} \text{ of } 80 = \frac{3}{8} \times 80$$

$$= 3 \times \frac{80}{8}$$

$$= 3 \times 10$$

$$= 30$$

30 pieces are left.

Question 4

Sarah spent $\dfrac{3}{4}$ of her time at the park reading.

She spent 120 minutes (2 hours) reading, how much time (in minutes) did she spend in the park?

Let T be the total amount of time she spent at the park.

$\dfrac{3}{4}$ of $T = 120$ | $\dfrac{3T}{4} = 120$ | $T = \dfrac{480}{3}$

$\dfrac{3}{4} \cdot T = 120$ | $\times 4 \quad \times 4$ | $T = 160$

$\dfrac{3T}{4} = 120$ | $3T = 480$ | Sarah spent 160 mins at the park.

$\dfrac{3T}{4} = 120$ | $\div 3 \quad \div 3$

$T = \dfrac{480}{3}$

Question 5

John weighed 81kg. After months of dieting and lots of sport he lost $\dfrac{1}{9}$ of his weight.

1. How much weight did John lose?
2. What is his new weight?

1) John lost $\dfrac{1}{9}$ of his weight

that's $\dfrac{1}{9}$ of $81 = \dfrac{1}{9} \times 81$

$= 1 \times \dfrac{81}{9}$

$= 1 \times 9$

$= 9$

John lost 9 kg

2) Since he lost 9kg, John's now weighs:

$81 - 9 = 72$ kg.