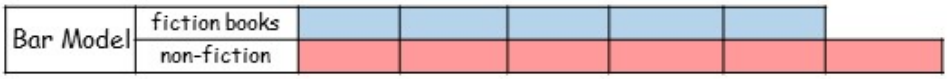
ANSWERS

BAR MODELS

Instructions: For each problem, draw a bar model to represent the ratio. Then, solve the problem by determining the value of one part and using it to find the required quantities. Write your answer in the space provided.

1) The ratio of fiction books to non-fiction books on a shelf is 5:6. If there are 30 fiction books, how many non-fiction books are there?



Solution:

Total parts for fiction books = **5**

Value of one part = $\frac{30 \text{ fiction books}}{5}$ = **6 books per part**

Total parts for non-fiction books = **6**

Number of non-fiction books = **6×6=36**

Answers: **There are 36 non-fiction books.**

2) The ratio of oranges to bananas in a fruit basket is 3:7. If there are 15 oranges, how many bananas are there?

Solution:

Total parts for oranges = **3**

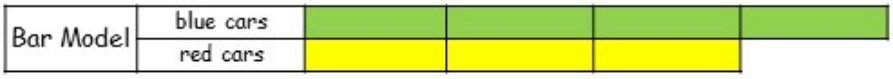
Value of one part = $\frac{15 \text{ oranges}}{3}$ = **5 oranges per part**

Total parts for bananas = **7**

Number of bananas = **7×5=35**

Answers: **There are 35 bananas.**

3) The ratio of blue cars to red cars in a parking lot is 4:3. If there are 28 blue cars, how many red cars are there?



Solution:

Total parts for blue cars = **4**

Value of one part = $\frac{28 \text{ blue cars}}{4}$ = **7 cars per part**

Total parts for red cars = **3**

Number of red cars = **3×7=21**

Answers: **There are 21 red cars.**

How Did You Do?