

### Answer on Question #42060 – Math – Algebra

If WC had 550 employees producing between 41 to 80% of their quota, how many employees in the BF department produced 160% or less of their quota?

AVERAGE % OF QUOTA 0 - 40% 41 - 80% 81 - 120% 121 - 120% 161% or more

BH	20%	30%	40%	5%	5%
BF	3%	2%	60%	20%	15%
MB	5%	5%	15%	60%	15%
WC	15%	55%	15%	5%	10%

\*\*\*Average % of Quota is % of employees in the department achieving each quota percentage\*\*\*

BH - Represents 25% of production employees

BF - Represents 10% of production employees

MB - Represents 40% of production employees

WC - Represents 25% of production employees

### Solution

If WC had 550 employees producing between 41 to 80% of their quota (55% of WC), then WC had

$$550 \cdot \frac{100}{55} = 1000 \text{ employees.}$$

WC - Represents 25% of production employees, so the total number of employees is  $1000 \cdot \frac{100}{25} = 4000$ .

BF - Represents 10% of production employees, then BF had  $4000 \cdot \frac{10}{100} = 400$  employees.

The number of employees in the BF department produced 160% or less of their quota is the total number of employees in the BF department minus number of employees in the BF department produced 161% or more of their quota:

$$400(1 - 0.15) = 340.$$

**Answer: 340.**