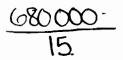# Suzi's Company

T1

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	$ 80 000
Production Manager	1	$80 000	$ 80 000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	$150 000
Cleaner	2	$20 000	$40 000
Total	15	*Total*	$680 000

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

   b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

   $ 45,333

   Show your calculations.

   $$\frac{680\,000}{15}$$

Suzi's Company   Test 7

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

He just saw the annual salary and saw that 80,000 was there twice what he didn't see was the number of people that get payed that much.

b. What is the correct mode of the salary? <u>$30,000</u>

3. a. What is the median annual salary at TechScale? <u>$40,000</u>

b. Explain how you figured it out.

Well I put the annual salary counting number of people in order. 20, 20, 30, 30, 30, 30, 30, 40, 40, 50, 50, 50, 80, 80, 100 then just crossed out the numbers,

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?

Explain your answer. <u>mean</u>

because it make people believe that you are going to get payed at 45,333 because that what most people are making.

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

<u>mode</u>

Suzi's Company   Test 7

Suzi's Company

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

GGFFFFF GE DDDC B

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	80,000
Production Manager	1	$80 000	80,000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	15,000
Cleaner	2	$20 000	40,000
Total	15	Total	545,000

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

   b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

   $ 36333

   Show your calculations.

   15) 545000 or

   $$\frac{545000}{15} = \$36333$$

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

John only looked at one colum when he needed to find out how many of each salary is paid.

b. What is the correct mode of the salary?

$30,000

3. a. What is the median annual salary at TechScale?

$40,000

b. Explain how you figured it out.

I lined up the numbers in order then found the 7th number in line and that is the median.

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?

median

Explain your answer.

Because the measure of central tendancy is higher than the others in this case.

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

mode

13

Suzi's Company   Test 7

Suzi's Company

T3

This problem gives you the chance to:
* calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	$80 000
Production Manager	1	$80 000	$80 000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	$150 000
Cleaner	2	$20 000	$40 000
Total	**15**	**Total**	**$680 000**

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

  b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

  $45,333

  Show your calculations.

$$
\begin{array}{r}
3 \\
100,000 \\
80,000 \\
80,000 \\
150,000 \\
80,000 \\
150,000 \\
40,000 \\
\hline
\$680,000
\end{array}
$$

$$
\begin{array}{r}
\$45333.\overline{3} \\
15\overline{)680,000}
\end{array}
$$

-60↓
80
-75↓
50
-45↓
50
-45↓
50
-45
50

40
40
80
80
80
80
150
15

Suzi's Company   Test 7

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

His mistake was that he counted it only for one person and not for others.

b. What is the correct mode of the salary? $150,000

3. a. What is the median annual salary at TechScale? $150.000

b. Explain how you figured it out.

First I put the numbers in order from smallest to largest and then found what number is in the middle of the set of numbers.

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?

Explain your answer.   median

The median number $150,00 shows about the averages at Techscale.

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

The mode and the median.

/15

10

Suzi's Company   Test 7

Suzi's Company

T4

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	$80 000
Production Manager	1	$80 000	$80 000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	$150 000
Cleaner	2	$20 000	$40 000
Total	**15**	**Total**	**$590 000**

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

   b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

   $ _39333.3_

   Show your calculations.

   $590 000 ÷ 15

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

John did the mode because $80 000 has 3 salary as a total

b. What is the correct mode of the salary?

$80 000

3. a. What is the median annual salary at TechScale?

$50 000

b. Explain how you figured it out.

In the ANNUAL SALARY column $100,000 is the largest and $20 000 is the smallest then you go to the secound smallest and biggest an, so on till you get to the middle

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?

$80 000

Explain your answer.

because you have 2 out of 15 chance to get $80 000

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

mode

10

Suzi's Company

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	$80 000
Production Manager	1	$80 000	$80 000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	$150,000
Cleaner	2	$20 000	$40,000
Total	**15**	**Total**	$680 000

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

   b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

   $ 4533.33

   Show your calculations.

   $$100,000$$
   $$80,000$$
   $$80,000$$
   $$150,000$$
   $$80,000$$
   $$150,000$$
   $$+ \quad 40,000$$
   $$\overline{\$ 680000}$$

   $$\$680,000 \div 15$$
   $$=$$
   $$\$4533.33$$

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

He did the _total_ cost of the job and didn't go by the _number of people_ and the _annual salary_. $30,000

b. What is the correct mode of the salary?

$30,000

3. a. What is the median annual salary at TechScale?

$40,000

b. Explain how you figured it out.

I took the number of people there was for their annual salary and lined them up Example. 100,000, 80,000, 80,000, 50,000, 50,000, 50,000, 40,000, 40,000, 30,000, 30,000, 30,000, 20,000, 20,000

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?

mean

Explain your answer.

Because, that's the highest prices there is, when you use, the mean, median and mode

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

mode

15

Page 3   Suzi's Company   Test 7

Suzi's Company

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	80,000
Production Manager	1	$80 000	80,000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	150,000
Cleaner	2	$20 000	40,000
Total	**15**	**Total**	680,000

20,20,30,30,30,30,30, 40,40,50
50,50,50,80,100

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

   b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

   $ 45,333

   Show your calculations.

   680000 ÷ 15 = 45,333

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

He didn't look at the number of people who make that much money he just looked at the total

b. What is the correct mode of the salary?   *30,000*

3. a. What is the median annual salary at TechScale?   *40,000*

b. Explain how you figured it out.

I put the numbers in order from least to greates + then I found the middle number + thats the answer

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?   *mean*

Explain your answer.

because it's the highest number out of all of them and that would be better to advertise or whatever you want to do with it.

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

The mode because it is still the highest number no matter what.

10

Suzi's Company

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	80,000
Production Manager	1	$80 000	80,000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	150,000
Cleaner	2	$20 000	40,000
Total	**15**	**Total**	680,000

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

   b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

   $ 45333.

   Show your calculations.

   $$\frac{680,000}{15} = 45333.\overline{3}$$

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

One of the eighty thousand dollars is divided between 2 people.

b. What is the correct mode of the salary?   80,000

3. a. What is the median annual salary at TechScale?   50,000

b. Explain how you figured it out.

Put them in order and find the number in the middle.

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?   mode ✓

Explain your answer.

The mean is 45333. The median is 50,000. The mode is 80,000. The mode shows the average.

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

mode

Suzi's Company   Test 7
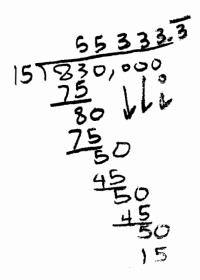
10

Suzi's Company

S3

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total	
Chief Executive	1	$100 000	$100 000	
Marketing Manager	1	$80 000	$80,000	
Production Manager	1	$80 000	$80,000	
Technician	3	$50 000	$150 000	
Office worker	2	$40 000	$80 000	
Assembly worker	5	$30 000	$150,000	
Cleaner	2	$20 000	$40,000	
Total	**15**	**Total**	$830,000	

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

   b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

   $ 55,333

   Show your calculations.

$$
\begin{array}{r}
55\,333.\overline{3} \\
15\,\overline{)830,000} \\
\underline{75} \\
80 \\
\underline{75} \\
50 \\
\underline{45} \\
50 \\
\underline{45} \\
50 \\
15
\end{array}
$$

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

John forgot to break up the totals by number of people. He forgot that each total salary is more than just one person.

b. What is the correct mode of the salary?

$30,000

3. a. What is the median annual salary at TechScale?

$40,000

b. Explain how you figured it out.

I broke up the salaries by the number of people that were in them. Then I (with my fingers) went from the outside to the center.

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?

Mean

Explain your answer.

Because it is the highest number.

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

Mode
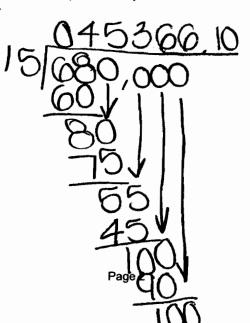
12 10

Suzi's Company

S4

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	$80,000
Production Manager	1	$80 000	$80,000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	$150,000
Cleaner	2	$20 000	$40,000
Total	**15**	**Total**	$680,000

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

   b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

   $ 45366.10

   Show your calculations.

   ```
        045366.10
   15/ 680,000
       60
       80
      -75
       55
       45
      100
       90
      100
   ```

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

John just looked to see which number showed up the most times on the table.

b. What is the correct mode of the salary?

$30,000

3. a. What is the median annual salary at TechScale?

$680,000

b. Explain how you figured it out.

I just added up all the numbers of salary together and I got the sum of $680,000

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?

median

Explain your answer.

because it shows all the numbers added together as one big number.

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

mode

Suzi's Company Test 7

10

Suzi's Company

This problem gives you the chance to:
- calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	$80 000
Production Manager	1	$80 000	$80 000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	$150 000
Cleaner	2	$20 000	$40 000
Total	**15**	**Total**	$680000

$8, 8, 8, 8, 8, 8, 4, 4, 5, 5, 5, 5$

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

   b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

   $ __4533__

   Show your calculations.

8:40

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

   a. What mistake has John made?

   He didn't look at the amount of people that made each salary. He just looked at what kind of job made it.

   b. What is the correct mode of the salary?   _$30,000_

3. a. What is the median annual salary at TechScale?   _$40,000_

   b. Explain how you figured it out.

   I took the #'s + placed them from least to greatest + found the middle #.

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?   _Mean_

   Explain your answer.

   It has the highest #'s of the mean, med. + mode.

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

   Which of the averages (mean, median and mode) will **not** change?

   Median + mode

Suzi's Company

S6

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	80,000
Production Manager	1	$80 000	80,000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	150,000
Cleaner	2	$20 000	40,000
Total	**15**	**Total**	680,000

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

   b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

      $ 45,333.

   Show your calculations.

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

Because It is not how many make that much 180,000-4 30,000-5

b. What is the correct mode of the salary?   _30,000_

3. a. What is the median annual salary at TechScale?   _150,000_

b. Explain how you figured it out.

You just look and see

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?   _Medan_

Explain your answer.

Because If you want people to work there you use the most which is the median

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

mode

8

Suzi's Company

S7

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	$80,000
Production Manager	1	$80 000	$80.000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	$150,000
Cleaner	2	$20 000	$40,000
Total	**15**	**Total**	$680,000

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

   b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

   $ 97, 143

   Show your calculations.

   7 | 680,000

   20, 30, 40, 50, 80, 80, 100

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

   a. What mistake has John made?

   I don't think he made a mistake, the mode is $80,000.

   b. What is the correct mode of the salary? $80,000

3. a. What is the median annual salary at TechScale? $50,000

   b. Explain how you figured it out.

   I put the #'s in order from least to greatest and found the one in the middle.

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?

                                                                mean

   Explain your answer.

   Because it shows you the average salery.

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

   Which of the averages (mean, median and mode) will **not** change?

                    the mode won't change

10

Suzi's Company

S8

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	$80,000
Production Manager	1	$80 000	$80,000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	$150,000
Cleaner	2	$20 000	$40,000
Total	**15**	**Total**	**$580,000**

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

   b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

   $ 38 667

   Show your calculations.

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

He saw that there were 3 .80's and only 1 of everything else but you actually have to look in the "Number of People" column to find that answer.

b. What is the correct mode of the salary?   _$30,000_

3. a. What is the median annual salary at TechScale?   _$40,000_

b. Explain how you figured it out.

First you would start at the bottom and look how many people there are and you would take that many off the top until you get to the middle

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?

Explain your answer.   _Median_

There are 6 more salaries that are almost all double of 40 thousand but there are nine close to it below 40.

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

Median

Suzi's Company

S9

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	*$80 000*
Production Manager	1	$80 000	*$80 000*
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	*$150 000*
Cleaner	2	$20 000	*$40 000*
Total	**15**	**Total**	*$680 000*

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

    b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

    $ _$45333_

    Show your calculations.

```
100 000                        45333.3
 80 000                   15 ) 680 000
 80 000                        60
 50 000                        ──
 50 000                        80
 50 000                        75
 40 000                        ──
 40 000                        50
(40 000)                       45
 30 000                        ──
 30 000                        50
 30 000                        45
 30 000                        ──
 30 000                        50
 20 000
 20 000
```

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

John just looked at the total pay for each position and thought that because 2 of the totals were $80,000 it was the mode when actually only 2 people make that much money.

b. What is the correct mode of the salary? $ 30 000

3. a. What is the median annual salary at TechScale? $ 40 000

b. Explain how you figured it out.

I ordered the annual salaries from least to greatest and wrote each dollar amount the same number of times as the people who make that much money. I then eliminated the numbers on the end until I found the number in the middle.

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?   *the mean*

Explain your answer.

Because it is higher than the mode or median and gives the impression that the average pay is higher.

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

the mode

Suzi's Company   Test 7

8

Suzi's Company

S10

This problem gives you the chance to:
• calculate and interpret mean, medium and mode in a given table of realistic data

Suzi is the chief executive of a small company, TechScale, which makes technical instruments. Fifteen people, including Suzi, work in the company. The table shows the jobs and their annual salaries.

Job Title	Number of people	Annual salary	Total
Chief Executive	1	$100 000	$100 000
Marketing Manager	1	$80 000	$80 000
Production Manager	1	$80 000	$80,000
Technician	3	$50 000	$150 000
Office worker	2	$40 000	$80 000
Assembly worker	5	$30 000	$150000
Cleaner	2	$20 000	$40 000
Total	**15**		**Total $680,000**

1. a. Complete the final column of the table to find the total annual salary bill for TechScale.

b. Use your answer to question 1a to calculate the mean annual salary for the 15 employees in the company. Give your answer correct to the nearest $.

$ 680,000

Show your calculations.

```
      100,000
  +    80,000
       80,000
      150,000
       80,000
      150,000
       49,000
      _____
      680,000
```

Suzi's Company Test 7

2. John looks at the table and says, "The mode of the salary at TechScale is eighty thousand dollars a year."

a. What mistake has John made?

He did not count how many people had these salaries.

b. What is the correct mode of the salary?

_$ 30,000_

3. a. What is the median annual salary at TechScale?

_40,000_

b. Explain how you figured it out.

I put them in order and found the one in the middle.

4. Which of the three averages, mean, median or mode, would you use to show that the average wage at TechScale is very good?

mean

Explain your answer.

Mean is the same thing as average.

5. Last year, TechScale did not do very well so Suzi decided not to pay herself any salary for a year.

Which of the averages (mean, median and mode) will **not** change?

Median

Suzi's Company   Test 7

10