

PART A: VERIFYING IF A BUDGET CAN ABSORB AN INCREASE OF AN EXPENSE OR AN UNEXPECTED EXPENSE

Question 1:

a) Below is Adrien's budget. How much has he budgeted for taxis?

----MONTHLY BUDGET----

| Revenue | | Expenses | |
|------------------|-----|----------------|-------|
| Salary | 366 | Fixed Costs | |
| Allowance | 160 | Rent | 500 |
| CPP (government) | 500 | Hydro | 30.85 |
| | | Variable Costs | |
| | | Food | 300 |
| | | Taxi | 190 |

\$190 - taxis

b) Since the price of gas has gone up, the price of taxis has also gone up by 5%. Can he still afford this expense?

New Cost = old cost + 0.05 (old cost)

$NC = 190 + 0.05(190)$

$NC = 199.5$

| Jan | | Feb | |
|-----|--------|-----|---------|
| R | | E | |
| S | | Q | |
| A | | H | |
| G | | N | 199.5 |
| TR | \$1026 | TE | 1030.35 |

Surplus: $TR - TE$

Deficit

-4.35 \$

the amount of money you owe.

Can't absorb because it a monthly expense. deficit X

----MONTHLY BUDGET----

| Revenue | | Expenses | |
|------------------|-----|----------------|-------|
| Salary | 366 | Fixed Costs | |
| Allowance | 160 | Rent | 500 |
| CPP (government) | 500 | Hydro | 30.85 |
| | | Variable Costs | |
| | | Food | 300 |
| | | Taxi | 190 |

c) If he eliminates taxis from his budget, could he afford to buy a bicycle that costs \$350 and use that as his transportation?

Jan

| | |
|----------|--|
| R | |
| S | |
| A | |
| G | |
| TR: 1026 | |

| | |
|-------------|---|
| E | |
| R | " |
| H | " |
| F | " |
| Bike 350 | |
| TE: 1180.85 | |

S or D TR - TE = -154.85 \$

Feb

| | |
|----------|--|
| R | |
| TR: 1026 | |

| | |
|--------------------------|--|
| E | |
| R | |
| H | |
| F | |
| Deficit from Bike 154.85 | |
| TE: 985.70 | |

S TR - TE = \$40.30

Deficit ok (can be absorbed) because miscellaneous one-time cost

----MONTHLY BUDGET----

| Revenue | | Expenses | |
|------------------|-----|----------------|-------|
| Salary | 366 | Fixed Costs | |
| Allowance | 160 | Rent | 500 |
| CPP (government) | 500 | Hydro | 30.85 |
| | | Variable Costs | |
| | | Food | 300 |
| | | Taxi | 190 |

d) Instead of taxis nor a bicycle, his mother wants to help him out by letting him use her second car. She will even pay for the gas. He will just have to pay for an insurance fee of \$225 three times a year (April/August/December). Can he afford it in his budget?

irregular expense → *recurring not at monthly rate*
spread out over months → *divide fee by # of months in between payments*

30th 30th 30th

4 months

1/4 of fee 1/4 of fee
 jan feb march
 may june july
 sept oct nov

april 30th
aug 30th
dec 30th

| | |
|------------|--------------------------------|
| R | E |
| S | R |
| A | H |
| O | F |
| TR: \$1026 | $\frac{225}{4} = 56.25$ |
| | $\frac{1}{4}$ of insurance fee |
| TE: 887.10 | |
| S: 138.9 | |

if deficit for an irregular expense [BAD]

PART B: DETERMINING THE PURCHASE WITH THE BEST VALUE FOR MONEY

Question 1: Adrien is a photographer and is interested in buying some black-and-white film that can take 24 pictures.

a) Which purchase gives him the best value for his money

| | |
|---|--|
| <p>i. 2 rolls of film for \$56.14</p> <p>$\text{Cost } \\$/\text{roll} \times \# \text{ of rolls} = \text{Total Cost}$</p> <p>$\frac{\\$}{\text{roll}} \times \frac{2 \text{ rolls}}{2 \text{ rolls}} = \frac{\\$56.14}{2 \text{ rolls}}$</p> <p>$\\$/\text{roll} = \\28.07 per roll</p> | <p>ii. \$28.50 a roll</p> <p>$\\$28.50/\text{roll}$</p> |
| <p>iii. A dozen rolls for \$336.84</p> <p>$\\$/\text{roll} \times \# \text{ of rolls} = \text{Total Cost}$</p> <p>$\frac{\\$}{\text{roll}} \times 12 = \frac{336.84}{12 \text{ roll}}$</p> <p>$\\$/\text{unit} = \\$28.07$ per unit</p> | <p>iv. Half-a-dozen rolls for \$168</p> <p>$\\$/\text{roll} \times \# \text{ of rolls} = \text{Total Cost}$</p> <p>$\\$/\text{roll} \times 6 = 168$</p> <p>$\\28 per roll</p> |

step i:
Find unit
cost (\$) of
each purchase

step ii:
pick
lowest
cost