## Using Rounding in Real-Life Situations

Sometimes in real-life situations, getting a quick answer is more important than achieving complete accuracy. Additionally, in some cases the nature of a problem will require some rounding to achieve a correct answer.

Use your rounding skills in the questions below. (Please note: the answers are based on rounding and estimates.)

1. A shop sells material in 1 metre lengths. A dress maker needs 3 lengths of material which are the following lengths $-88 \mathrm{~cm}, 189 \mathrm{~cm}$ and 80 cm . How many metres of material should she buy?


Length of material $=$ $\square$
2. Imagine you have to make a quick estimate of the length of a fence that will be required to surround a field. The owner wants an idea of a price straight away. How close can you get in 10 seconds? Rounding will help.

Side $1=1,756 \mathrm{~cm} \quad$ Side $2=1,678 \mathrm{~cm} \quad$ Side $3=1,419 \mathrm{~cm} \quad$ Side $4=1,949 \mathrm{~cm}$


Length of fence $=$ $\square$
3. Votes are being counted in the election and the Red Party candidate wants to have an idea of whether he has won or lost. Can you round the numbers and add them quickly to give him the likely news?

|  | Area 1 | Area 2 | Area 3 | Area 4 | Area |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Red Party | 12,345 | 9,876 | 15,499 | 6,701 | 11,282 |
| Blue Party | 8,781 | 14,456 | 16,221 | 5,207 | 8,871 |


4. Karim decides to organise a pizza party for his friends. He decides that everyone will eat a whole pizza and he wants to invite 63 friends. If the pizzas cost $\$ 2.50$ per person but the bank only allows withdrawals in multiples of $\$ 10$, how much should he withdraw from the bank?


Withdraw = $\square$
5. David wants a quick estimate of the amount he has earned in the last year to start calculating his tax. Working as quickly as you can, can you give him a rough estimate of David's earnings on David's behalf?

| Job | Post Office | Office | Cleaning |
| :--- | :--- | :--- | :--- |
| Income | $\$ 12,756$ | $\$ 9,452$ | $\$ 2,754$ |

$\square$
6. Beneath is a list of Gregor's monthly outgoings together with the wage he would be paid for a new job. Can he afford to take the new job? Work it out as quickly as you can because they are waiting for his answer.

| Rent | $\$ 529$ | Gas and Electric | $\$ 107$ | New Wage |
| :--- | :--- | :--- | :--- | :--- |
| Petrol | $\$ 77$ | Telephone and <br> Broadband | $\$ 38$ | $\$ 1,458$ |
| Food | $\$ 371$ | Clothes | $\$ 67$ |  |
| Council Tax | $\$ 115$ | Leisure expenses | $\$ 82$ |  |

Rounded cost of living per month $=$ $\square$
Can Gregor afford to take the new job? $\square$

## Using Rounding in Real-Life Situations Answers

1. A shop sells material in 1 metre lengths. A dress maker needs 3 lengths of material which are the following lengths $-88 \mathrm{~cm}, 189 \mathrm{~cm}$ and 80 cm . How many metres of material should she buy?

357 cm to the nearest 4 metres.
2. Imagine you have to make a quick estimate of the length of a fence that will be required to surround a field. The owner wants an idea of a price straight away. How close can you get in 10 seconds? Rounding will help.
$1,800+1,700+1,400+1,900=6,800 \mathrm{~cm}$
3. Votes are being counted in the election and the Red Party candidate wants to have an idea of whether he has won or lost. Can you round the numbers and add them quickly to give him the likely news?

Winning party = Red by approximately 2,000 votes.
4. Karim decides to organise a pizza party for his friends. He decides that everyone will eat a whole pizza and he wants to invite 63 friends. If the pizzas cost $\$ 2.50$ per person but the bank only allows withdrawals in multiples of $\$ 10$, how much should he withdraw from the bank?
$63 \times £ 2.50$ = \$157.50 therefore, he needs to withdraw \$160 from his bank account.
5. David wants a quick estimate of the amount he has earned in the last year to start calculating his tax. Working as quickly as you can, can you give him a rough estimate of David's earnings on David's behalf?
$\mathbf{\$ 2 5 , 0 0 0}$ when amounts are rounded to nearest thousand.
6. Beneath is a list of Gregor's monthly outgoings together with the wage he would be paid for a new job. Can he afford to take the new job? Work it out as quickly as you can because they are waiting for his answer.
\$1,400-Yes, Gregor can afford to take the new job.

