Integer Applications - Solve word problems involving integers.



Example

Molly earns \$35 per week from her after school job. If she manages to save \$18 a

week for 52 weeks will she have enough money to purchase a \$1000 second-hand motor scooter? If not how much will she be short?



Writing as an expression

 $52 \times 18 - 1000$

= -\$64

She will be short \$64.



Application Problems

For each of the questions form an integer expression and then solve.

1. Zina's overdraft at the bank stands at \$2435 (i.e. -\$2435). She receives her pay and deposits \$245 into her account. At the end of the week she pays her credit card bill of \$190. What does her account balance stand at by the end of the week?



- 2. Mei earns \$1548 a month after tax, but spends on average \$1615 per month. After 12 months how much will she be in debt by?
- 3. A submarine dives to a depth of 132 metres (i.e. -132 m) and then later dives another 84 metres further down. What will be its new depth?

- 4. An oil company drills to a depth of 385 metres before the drill becomes wedged into rock. It is raised 52 metres before drilling down from this point another 118 metres. What is the final depth of the drill?
- 5. Rawiri has budgeted \$450 for his weekend break. When he returns home he finds he has spent \$85 on fuel, \$123 on food, \$65 on entertainment and \$195 on accommodation. Has he overspent his budget? If so, by how much?



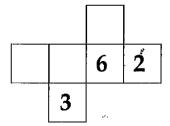
6. Steve received his bank statement. On the top it showed the opening balance to be \$268. It then showed the following cheques had been debited (subtracted) from the account \$57, \$49, \$93, \$113, \$40.

The final transaction was a credit (deposit) for \$70. What is the current balance of Steve's cheque account? What does this balance mean?



Problem Solving

The shape (net) can be folded to make a die (singular of dice). Enter the three missing numbers on the net so that when it is formed the opposite sides of the dice total 7.



I found this work

Proportion completed

OR Difficult

None Few Half Most All