## Holiday Pay

## You need: a computer spreadsheet (optional)

Offer 1: no commission on the first $\$ 300$.

Jane is offered a 5 -days-a-week job selling CDs for a music shop for 3 weeks of her school holidays. She can choose one of the following ways of being paid:

## 0 ffer 1

On total daily sales over \$300:

10\% commission

## $0 f f e r 2$

On total daily sales over \$100:
$1 \%$ commission: day 1
2\% commission: day 2
3\% commission: day 3
$15 \%$ commission: day 15


1. a. The shop manager said Jane would probably sell $\$ 600$ worth of CDs each day. Complete the table below to show Jane's possible daily pay and cumulative pay over the 3 weeks ( 15 days) for each offer, based on daily sales of $\$ 600$.

| Offer 1 | Offer 2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Day | Daily pay | Cumulative total | Daily pay | Cumulative total |
| $\mathbf{1}$ | $\$ 30$ | $\$ 30$ | $\$ 5$ | $\$ 5$ |
| $\mathbf{2}$ | $\$ 30$ | $\$ 60$ | $\$ 10$ | $\$ 15$ |
| $\mathbf{3}$ | $\$ 30$ | $\$ 90$ | $\$ 15$ | $\$ 30$ |
| $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ |

b. Use your table to draw a graph that shows Jane's possible pay for each offer.
c. If Jane worked for 2 weeks ( 10 days), which offer would give her the best pay?
d. How many days would Jane need to work before both pay offers gave her the same?
2. If Jane worked for the 3 weeks, which offer should she accept?
3. a. Investigate what happens if you change the offers to: Set these offers out in a table and show them on your graph. Then write a report comparing all the offers.
b. Investigate how the offers would compare if Jane worked for 4 weeks. (Assume that the commission in offer 4 keeps increasing.)


## Offer 4

On total daily sales over \$200:
1\% commission: day 1
2\% commission: day 2

15\% commission: day 15

