

Cellphone Confusion

You need: a calculator

ACTIVITY



I'll buy you a cellphone for your birthday as long as you pay the monthly bills.

Thanks, Dad! You're the man!

I wonder which plan I should use?

Yackety Y@ck
Call Company

New cellphones are only \$100 when you subscribe to our Connect 100 plan.

\$25.00 per month includes 100 off-peak minutes and 15 free text messages.

Daytime calls are 99 cents per minute.
Off-peak calls are 49 cents per minute.

Text messages cost 20 cents.

<BUSY LINES>

New cellphones are \$200.

No monthly fee for the first 3 months, then \$30 per month on our Speakeasy 150 plan.

You get 150 free off-peak minutes per month.

You get 10 free text messages per month.

Daytime calls are 99 cents per minute.
Off-peak calls are 65 cents per minute.

Text messages cost 15 cents.

Off-peak times are 7 p.m. to 7 a.m. Monday to Friday and all weekends and public holidays. Extra off-peak calls are charged at the off-peak rate.



Tapatu estimates that she will make the following use of her phone in a typical month:

- 20 one-minute calls during peak time
- 110 minutes of calls after 7 p.m. on weekdays
- 80 minutes worth of calls at the weekend
- 120 text messages.

1. a. If she chooses a Yackety Yack phone, how much will Tapatu pay each month:
 - i. for calls?
 - ii. for text messages?
 - iii. in total?
- b. What will she pay over 12 months?

2. If she chooses a Busy Lines phone, how much will she pay each month:
 - a. for calls?
 - b. for text messages?

3. Using Busy Lines, how much will she pay
 - a. for each of the first 3 months?
 - b. in total over the first 12 months?

4. a. Which is the cheaper company for Tapatu to subscribe with?
 - b. Would they still be the cheaper company after 24 months?

5. What if Tapatu had to pay the initial cost of the phone?
 - a. 12 months?
 - b. 24 months?

6. Check the charges for real cellphone companies. Compare their rates.

