

Cameron pays \$0.95 per song with his ~~current~~ music service. A new music download service charges \$0.89 per song with just a \$12 joining fee. When will the cost be the same?

HINTS

- > Write an equation to represent the cost for any number of songs,  $s$ .
- > Solve the equation to find the number of songs at which the cost for each option will be the same.
- > Interpret your solution.

Current:  $0.95s$

New:  $0.89s + 12$

$$\begin{array}{r} 0.95s = 0.89s + 12 \\ - 0.89s \quad - 0.89s \\ \hline \end{array}$$

$$\begin{array}{r} .06s = 12 \\ \hline .06 \quad .06 \end{array}$$

$$s = 200$$



Tim is choosing between two cell phone plans that offer the same amount of free minutes. At&t plan charges \$39.99 per month with additional minutes costing \$0.45. Verizon's plan costs \$44.99 with additional minutes at \$0.40. How many additional minutes,  $m$ , will it take for the two plans to cost the same?

a) Write an expression for AT&T

$$39.99 + .45m$$

b) Write an expression for verizon

$$44.99 + .40m$$

c) How many additional minutes,  $m$ , will it take for the two plans to cost the same?

$$39.99 + .45m = 44.99 + .40m$$

$$\begin{array}{r} 39.99 + .45m \\ - .40m \\ \hline 39.99 + .05m \\ - 39.99 \\ \hline .05m \\ \hline .05 \\ \hline m = \end{array}$$

$$m =$$

