

Creating formula given particular conditions:

Hire prices

A Panasonic TV costs £12 a week.

A Sony TV costs £8 a week with a one off extra charge of £50

A DVD player costs £8 a fortnight with a one off charge of £40

You must...Fill in the following table. Put your working out in the 'working row' and then put your answer in the row below:

	1 week	2 weeks	3 weeks	5 weeks	8 weeks	20 weeks	50 weeks	1 year	10 years
Panasonic working									
Panasonic Cost									
Sony working									
Sony cost									
DVD working									
DVD cost									

You should...Create a separate algebraic expression for each of the three pieces of equipment. Use  $n$  for the number of weeks.

You must...Now explore the following questions:

- 1) Should you hire a Panasonic TV or a Sony TV
- 2) How long would it take before you would be paying £1000 for a Panasonic TV
- 3) Suppose Jack has a Sony TV and a DVD. How long would it be before he has paid a total of £2000
- 4) A Sony TV costs £900. How long would it be before it would be more viable to actually purchase the TV rather than hiring it?

You could...Create a 'story' for the following expressions

$65n$                        $14n + 80$                        $32n + 70$

$15n+6-6$                        $4 + 15n - 2$                        $17n - 5$

You could also...create your own stories with expressions