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## Wksht 6.3

1. Suri drives at an average speed of $90 \mathrm{~km} / \mathrm{h}$. The equation relating distance, $d$, and time, $t$, is $d=90 t$.
a) Complete a table of values to represent the relation.
b) Show the relationship on a graph.
c) How long does it take Suri to drive 630 km ?
2. For each linear equation, create a table of values and a graph.
a) $b=-2 a-15$
b) $t=-3$
c) $g=\frac{f}{4}-2$
3. Create a graph and a linear equation to represent each table of values.
a)

| $x$ | $y$ |
| ---: | ---: |
| -3 | 4 |
| -2 | 4 |
| -1 | 4 |
| 0 | 4 |
| 1 | 4 |
| 2 | 4 |
| 3 | 4 |

b)

| $\boldsymbol{a}$ | $\boldsymbol{g}$ |
| :---: | :--- |
| 10 | 8 |
| 11 | 8.5 |
| 12 | 9 |
| 13 | 9.5 |
| 14 | 10 |
| 15 | 10.5 |

c)

| $\boldsymbol{t}$ | $\boldsymbol{d}$ |
| :--- | :--- |
| 0 | -2.0 |
| 1 | -1.75 |
| 2 | -1.5 |
| 3 | -1.25 |
| 4 | -1 |
| 5 | -0.75 |

4. The graph shows the relationship between the fuel consumption, $f$, in litres (L), and the distance driven, d, in kilometres (km).

a) What is the linear equation?
b) How far could you drive with 34 L of gas?
c) Is it appropriate to interpolate or extrapolate values on this graph? What assumption is being made? Explain.
