1) a) 5.802
b) $\mathbf{7 . 0 2 5}$
c) $\mathbf{7 . 8 2 2}$
d) 8.139
2) a) and c) are incorrect.

A sensible estimate for $a$ ) would be 9. The correct answer is $\mathbf{8 . 8 6 1}$
A sensible estimate for b) would be 5 . The correct answer is 5.425
3) 6.246 km

1) Philip is correct. Holly has made the mistake of not lining up the digits according to their value. Lining up the decimal point can help with this, as can be seen with Philip's method.
2) 



|  | 3 | 2 | 4 |  |
| :--- | :--- | :--- | :--- | :--- |
| + | 1 | 6 | 8 | 3 |
|  | 4 | 9 | 2 | 3 |
|  |  |  |  |  |


|  | $\mathbf{2}$ | 5 | $\mathbf{0}$ | $\mathbf{8}$ |
| :--- | :--- | :--- | :--- | :--- |
| + | 2 | $\mathbf{6}$ | 7 |  |
|  | 5 | 1 | 7 | 8 |
|  |  |  |  |  |

1) Possible solutions include:
$3.456+2.71=6.166$
$5.267+1.34=6.607$
$2.765+4.13=6.895$
$3.761+2.54=6.301$
2) Possible solutions include:
$3.26+7.145=10.405$
$2.35+7.614=9.964$
$2.13+7.546=9.676$
$7.14+3.256=10.396$
3) Possible solutions include:
$3.7+5.24+1.06$
$3.2+1.76+5.04$
$3.2+1.06+5.74$
Answers will vary. For example, the tenths, hundredths and thousandths have a total of 1 and therefore as long as they keep that value, the digits can be moved around in the calculation.
