A 1. Solve these simultaneous equations graphically. Use values of $x$ from -4 to 4 .
a) $y=x^{2}$

$$
y=4 x-3
$$


b) $y=2-x^{2}$

$$
y=x
$$


c) $y=x^{2}+2$

$$
x+y=8
$$


d) $y=9-x^{2}$
$2 x+y=6$

e) $y=x^{2}+4 x+1$
$y=x-1$


## Solving simultaneous equations graphically when one is linear the other is quadratic

f) $y=x^{2}-2 x+1$
$x+y=3$


## Solving simultaneous equations graphically when one is linear the other is quadratic

A 2. Solve graphically the simultaneous equations $y=x^{2}+3 x+1$ and $y=2 x+5$. Give your solutions correct to 1 decimal place.

| , |  |  |  |  |  | y |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 12. |  |  |  |  |
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|  |  |  |  |  |  | 10. |  |  |  |  |
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|  |  |  |  |  |  | 9 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 8. |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 7. |  |  |  |  |
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|  |  |  |  |  |  | 6 |  |  |  |  |
|  |  |  |  |  |  | 5 |  |  |  |  |
|  |  |  |  |  |  | 5 |  |  |  |  |
|  |  |  |  |  |  | 4. |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 3. |  |  |  |  |
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|  |  |  | -3 |  | 2 | -1 0 |  |  | 2 | $3 x$ |
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|  | + |  |  |  |  |  |  |  |  |  |

## Solving simultaneous equations graphically when one is linear the other is quadratic

3. Solve graphically the simultaneous equations $4 y=6 x^{2}-2$ and $y=2 x+1$.

Give your solutions correct to 1 decimal place.

|  | , |  | - |  |  |  |  |  | $y^{\prime}$ |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 12. |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 12 |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  | 11 |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  | 8 |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 7. |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | $6-$ |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | - |  |  |  |  |  |  |  | 5 |  |  |  |  |  | - |  |  | - | - |
|  |  |  |  |  |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  | - |
|  |  |  |  |  |  |  |  |  | $4-$ |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  | $3-$ |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  | 2 | -1 | O |  |  |  |  |  | 2 |  | 3 |  | $4 x$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |
|  |  |  |  |  |  |  |  |  | -1- |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - | $\square$ |
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