## Homework 15

Hand in: $\qquad$

Do not use a calculator for questions 1-6. You must show all your working out where the question number is underlined. For these questions stating an answer without showing a written method will not score a mark.

| 1. Two fifths of an amount | 2. Calculate the product of <br> is 24. What is the <br> amount? |
| :--- | :--- |
| 3. Expand the brackets 0.9. |  |
| and simplify; |  |
| 2(3a +7$)+4(2 a+1)$ | 4. 5 out of 20 people prefer <br> coffee. What angle should <br> represent them on a pie <br> chart? <br> - |


| 5. Write 0.85 as a fraction in its simplest form | 6. Write these numbers in ascending order. $0.62,67 \%, \frac{13}{20}$ |
| :---: | :---: |
| 7. Decrease 340 by 22\% | 8. Draw the mirror line on the diagram. |
| 9. Complete the sets of coordinates using the equation $y=3 x-4$ <br> (3, $\qquad$ ) ( | 10. Calculate the midpoint of 41 and 73 . |

## Gold:

Complete the table of values and plot the graph of
$y=x^{2}+2 x+1$

| $x$ | $y$ |
| :---: | :---: |
| -4 | 9 |
| -3 | 4 |
| -2 | 1 |
| -1 | 0 |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |



## Silver:

Substitute the following values into the expressions below.

$$
a=3 \quad b=10 \quad c=2
$$

1. $a+b c=$
2. $4 \mathrm{ac}=$
3. $3 a+4 b-5 c=$

Generate coordinates and plot the graph for $y=3 x+1$


| $x$ | $y$ |
| :---: | :---: |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |

## Bronze:

Substitute the following values into the expressions below.

$$
a=4
$$

$$
b=10
$$

$$
c=2
$$

$$
d=1
$$

$$
a+b+c+d=
$$

$$
10 \mathrm{a}=.
$$

$$
3 b+5 c=
$$

$$
6 d+2 c+b=
$$

$$
a b+3 d=
$$

