# Family Pedigree of Walid and Nadia <br> (predicting children traits) 

## Waleed's Grandparents

Father's side

| Hair color | Curly/not curly | Eyes color |
| :--- | :--- | :--- |
| A - Jet black | B - curly | C - black |
| a - medium <br> brown | b - not curly | c - brown |


| P generation: | ๆ AAbbCc | $\widehat{C l}_{\text {aa Bb cc }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Gametes: | ABC; Abc | $a \mathrm{Bc} ; \mathrm{abc}^{\text {c }}$ |  |  |
| F1 Generation: | Aa BB CC-dad; | Aa Bb Cc; | Aa Bb cc; | Aabb cc |
| Jet black hair color |  |  |  |  |
| Curly |  |  |  |  |
| Black eyes' color |  |  |  |  |

Mother's side

| Hair color | Curly/not curly | Eyes color |
| :--- | :--- | :--- |
| A - Jet black | B - curly | C - blue |
| a - medium <br> brown | b- not curly | c - green |

Pgeneration:
Gametes:

F1 Generation:

| f | ABC | ABc | Abc | AbC | abc | $a B C$ | $a B c$ | $a b C$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| abc | AaBbCC | AaBbCc | AabbCc | Aabbcc | aabbCc | aaBbCC | AABbCc | $\frac{\text { aaBbCC- }}{\text { mom }}$ |

## Waleed's Parents



| Hair color | Curly/ not <br> curly | Eyes' color |
| :--- | :--- | :--- |
| A-Jet black | B-curly | C-black |
| a-medium <br> brown | b-not curly | c-blue |

## Waleed and Nadia



Chance of having a child with blue eyes is 25\%

Chance of having a child with straight hair is 50\%


