## [**Cori Berry**](https://ashford.instructure.com/courses/3058/users/32584)

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Cowling’s Rule: A formula which converts an adult dose into a child’s dose using the child’s age.

The **Formula** for A and B:

d = D(a +1)/24

D = Adult dosage

d = Child dosage

a = Childs age

I chose #9 on the Cowling’s List:

 A.

This **Literal equation** is going to help me **solve** what dosage we would use for an 8-year-old child. A = 8

d = D(a + 1)

 24

d = 400(8 +1)

 24

d = 400 \*(9)

 24

d = 3200

 24

The answer comes to 0.1333 so the dose for the 8-year-old child would be 133mg.

 B.

Using the same **literal equation** d = D(a + 1)/ 24 I am going to **substitute** d =250mg and D = 500mg to find out what the child’s age would be for that dose.

250 =500(a +1)

 24

Now that I **substituted** both values the result is going to be a **conditional equation**, there is only one value for *a* to make it true.

24 \* 250 = 500(a +1) \*24

 24

 6000 = 500(a +1)

 6000 = 500 (a +1)

 500 500

 12 = a +1

 12 – 1 = a + 1 – 1

 11 = a

So, 11 years old would be the correct dosage for 250mg.