UNIT 8 EXERCISES 1-5

BIRTHDAYS

2006A

3. **(B)** Mary is $(3/5)(30) = 18$ years old.

2009B

5. **Answer (D):** The age of each person is a factor of $128 = 2^7$. So the twins could be $2^0 = 1$, $2^1 = 2$, $2^2 = 4$, $2^3 = 8$ years of age and, consequently, Kiana could be $\frac{128}{1^2} = 128$, $\frac{128}{2^2} = 32$, $\frac{128}{4^2} = 8$, or $\frac{128}{8^2} = 2$ years old, respectively. Because Kiana is younger than her brothers, she must be 2 years old. The sum of their ages is $2 + 8 + 8 = 18$.