Section 6 Review Special Products

The use of algebra and it's symbolism has advanced the areas of science and technology over the century's. This chapter we develop a strong sense of the arithmetic in algebra and it's uses in our world.

The objective for this section is to:

- Review products including some very special ones
- Process the cubing of binomials

Find the indicated products directly by inspection. It should not be necessary to write donw intermediate steps.

1. $3a^2(2a+7)$

4. $(1-e^3)(7-e^3)$

2. $(3x-7)(4x+5)$

5. $\left[(6t-y)(6t+y)\right]^2$

3. $(i_1+4)^2$

6. $(x+2+3y)^2$

7. $L_0\left[1+a\left(T-T_0\right)\right]$ used in thermal

expansion

8. $\dfrac{1}{2}\pi\left(R+r\right)\left(R-r\right)$ used in

architecture