Student 6: High Not Achieved

NZ@A Intended for teacher use only

Business area high rise

If this building will be 15 floors and each office on a higher floor is 5% similar or more 6\$ so

$$t_{15} = 120 + (15 - 1) \times 6 = 204$$
 outside + inside = 2430 + (102 x 15) = 3960

$$s_{15} = \frac{15}{2}(2 \times 120 + (15 - 1) \times 6) = 2430$$

If the building will be 23 floors high

$$t_{23} = 120 + (23 - 1) \times 6 = 252$$

$$s_{23} = \frac{23}{2}(2 \times 120 + (23 - 1) \times 6) = 4278$$

Outside + inside = $4278 + (102 \times 15) = 5808$

Industrial area high rise

If the building will be 15 floors high:

$$t_{15} = 103 + (15 - 1) \times 3 = 145$$

$$s_{15} = \frac{15}{2}(2 \times 103 + (15 - 1) \times 3) = 1860$$

Total: $1860+(65 \times 15) = 2835$

If the building will be 32 floors high

$$t_{32} = 103 + (32 - 1) \times 3 = 196$$

$$s_{32} = \frac{32}{2}(2 \times 103 + (32 - 1) \times 3) = 4784$$

Total: $4784 + (65 \times 32) = 6864$