

Practice Problems

CATEGORY: COST APPROACH

TOPIC: FAR AND SITE COVERAGE RATIO

Problem – A developer wants to build the tallest building possible using the largest building footprint available on the site. What site should he purchase?

Option #1 – Site area is 3 acres, the city's maximum site coverage ratio is 20% and the city's floor area ratio (FAR) for this site is .80.

Option #2 – Site area is 2.6 acres, the city's maximum site coverage ratio is 23% and the city's floor area ratio (FAR) for this site is .75.

Option #3 – Site area is 3.79 acres, the city's maximum site coverage ratio is 28% and the city's floor area ratio (FAR) for this site is .70.

Problem Solution – NEXT PAGE

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Problem Solution

- Option #1: 3 acres = 130,680 square feet
Largest building footprint = $130,680 \times .20 = 26,136$ square feet
Largest building = $130,680 \times .80 = 104,544$ square feet
Maximum building height = $104,544 \div 26,136 = 4$ stories
(shortcut: $.8 \div .2 = 4$)
- Option #2: 2.6 acres = 113,256 square feet
Largest building footprint = $113,256 \times .23 = 26,049$ square feet
Largest building = $113,256 \times .75 = 84,942$ square feet
Maximum building height = $84,942 \div 26,049 = 3$ stories
(shortcut: $.75 \div .23 = 3.26$)
- Option #3: 3.79 acres = 165,092 square feet
Largest building footprint = $165,092 \times .28 = 46,226$ square feet
Largest building = $165,092 \times .70 = 115,564$ square feet
Maximum building height = $115,564 \div 46,226 = 2$ stories
(shortcut: $.7 \div .28 = 2.5$)

