Morphological Image Processing I
Solutions to problems given in L06

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Computer Assisted Image Analysis
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Example: erosion

Orginal object (0-BG,1-FG):

After erosion:
Example: dilation

Original object (0-BG,1-FG):

After dilation:

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Example: opening

Orginal object (0-BG,1-FG):

After opening:
Example: closing

Orginal object (0-BG,1-FG):

After closing:

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Example: hit-or-miss transform

Original image:

Result:
Example: hit-or-miss transform (intermediate steps)

Slide 31

Original eroded with $B_1$:

Complement eroded with $B_2$:

Note that two top left objects in $X^c$ are shifted 1 row up (by mistake!) in slide 31.
gray - original concave object
red - the first pass
green - the second pass
blue - the third pass
black - the fourth pass
all together - the convex hull