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Computer Graphics

HW 1

1. Cohen–Sutherland algorithm, Sketchpad

2.

1. A.(BxC) = 42

2. (AxB).C = 42

3.

(A - C) X (A - B) = [a,b,c]'

a = 0 , b = 1 , c = 1

d = -2

intersects at [1,1,1]

5.

1.1

Advantage is that each primitive can be processed independently leading to better performance. The disadvantage is that shadows reflections and blending are difficult to handle correctly

6. 1.8

1/(1280 x 1024 x 72) = 1.09 e - 8 = 11 ns/pixel

1/(640 x 480 x 60 / 2) = 1.085 e -7 = 109 ns/pixel