



Image Analysis for Pathologists: Basic Information Needed to Make Sense of the Machine Learning/Artificial Intelligence Revolution

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Case-Based Questions (please see page 3 for answers)

1.	Clinical diagnostic aids:
a.	Replace physicians
b.	Improve medical decision making
c.	Are embedded in the physician computer interface
d.	All of the above
e.	B and C

2.	Convolution of an image refers to:
a.	Changing the contrast of the image
b.	Changing the hue, saturation, and value of an image
c.	Panning an odd-numbered matrix/filter/kernel over an image for processing
d.	Is only done in convolutional neural networks
e.	Is never done in convolutional neural networks

3.	Image Texture can be measured by:
a.	Mean pixel intensity
b.	Haralick features such as entropy
c.	Eccentricity
d.	Touch
e.	Distance measurements

Scroll to Page 3 for answers

Correct Answers and Rationales

Question 1 Correct Answer and Rationale: **e. B and C**

Rationale:

Question 2 Correct Answer and Rationale: **c. Panning an odd-numbered matrix/filter/kernel over an image for processing**

Rationale:

Question 3 Correct Answer and Rationale: **b. Haralick features such as entropy**

Rationale: