(x, y, z)

41.) $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2 + (z_2 - z_1)^2}$

$d = \sqrt{(5-6)^2 + (-3--11)^2 + (3-7)^2}$

$d = \sqrt{(-1)^2 + (8)^2 + (-4)^2}$

$d = \sqrt{1 + 64 + 16}$

$d = \sqrt{81} = 9$

C

42.) $\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}, \frac{z_1 + z_2}{2}\right)$

$\left(\frac{1+4}{2}, \frac{-5+4}{2}, \frac{3+4}{2}\right)$

$\left(\frac{5}{2}, \frac{-1}{2}, \frac{7}{2}\right) = (2.5, -0.5, 3.5)$

C

44.)

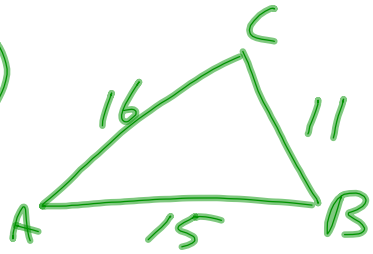
$8(-6) + 2(24) + 7(-9)$

$= -48 + 48 + -63$

$= -63$

D

3.)



$11^2 = 15^2 + 16^2 - 2(15)(16)\cos A$

$121 = 225 + 256 - 480\cos A$

$121 = 481 - 480\cos A$

$-481 \quad -481$