

Form 1 (white)

Multiple Choice

1-d	2-b	3-a	4-b	5-c	6-a	7-e	8-e	9-c	10-d
11-e	12-d	13-b	14-d	15-e	16-b	17-b	18-a	19-b	20-b
21-a	22-b	23-e							

Written Answer Questions

1. The diagram can not be “skeletal”, but must show all atoms by their chemical symbol.

glycerol with stearic acid esterified on carbon 1 and omega-4-palmitic acid on carbon 2 with the phosphate on carbon 3 and ethanolamine esterified to the phosphate. Omega 4 is the same as Δ^{12} .

2. 1.67×10^{-9} moles.

3. 25.7 molecules of phospholipids in the outer leaflet of the membrane (one half of the total phospholipid molecules) / protein.

Form 2 (yellow)

Multiple Choice

1-a	2-b	3-d	4-a	5-c	6-a	7-b	8-a	9-c	10-a
11-b	12-e	13-e	14-a	15-c	16-d	17-b	18-e	19-a	20-b
21-c	22-b	23-e							

Written Answer Questions

1. The diagram can not be “skeletal”, but must show all atoms by their chemical symbol.

glycerol with myristic acid esterified to carbon 1 and omega-6-palmitic acid on carbon 2 with phosphate on carbon 3 and choline esterified to the phosphate. Omega 6 is the same as Δ^{10} .

2. 1.67×10^{-10} moles.

3. 22 molecules of phospholipids in the inner leaflet of the membrane (one half of the total phospholipid molecules) / protein.

Grade Distribution:

Average = 57 +/- 17.5 High=91 Low=18