

1. b, g
2. c, f
3. If you insist on interpreting the dot as a dot product, then the answer is a. If you realize you can interpret the dot as scalar multiplication, then the answer is c, f.
4. b, i
5. a
6. e, j, m, q
7. e, k, q
8. j, m
9. j, m
10. l
11. n
12. a
13. e, k, q
14. a
15. e, v
16. d, r
17. d, o. The graph is a parabola in the  $z-x$  plane. However, you can instead interpret this as a surface in three-space which doesn't happen to depend on  $y$ . In that interpretation, the graph is a parabolic cylinder running along the  $y$ -axis, and choice r is an additional option.
18. t, a circle in the  $x-y$  plane. However, you can instead interpret this as a surface in three-space which doesn't happen to depend on  $z$ . In that interpretation, the graph is a circular cylinder running along the  $z$ -axis, and choice s is an additional option.
19. d, p
20. s