

7. [15 points] In the table below, there is at least one function that could be exponential and one that could be linear.

q	1	4	5
$A(q)$	17	$\frac{11}{3}$	5
$B(q)$	$\frac{8}{3}$	9	$\frac{27}{2}$
$C(q)$	125	25	1
$D(q)$	$\frac{3}{2}$	2	$\frac{13}{6}$

- a. [3 points] Which of the above functions could be linear? Circle your answer(s). You do not have to show your work for this part.

$A(q)$

$B(q)$

$C(q)$

$D(q)$

- b. [3 points] Which of the above functions could be exponential? Circle your answer(s). You do not have to show your work for this part.

$A(q)$

$B(q)$

$C(q)$

$D(q)$

- c. [4 points] Find a possible formula for one of the functions above that you found could be linear. Show your work, and circle your answer.

- d. [5 points] Find a possible formula for one of the functions above that you found could be exponential. Show your work, and circle your answer.