

## Part 5a solutions

<b>a)</b>				<b>b)</b>
TF	b	d		IDF
a		4	2	0.30103
b		0	0	0.47712125
c		4	2	0.30103
d		0	0	0.47712125
e		0	2	0.47712125
f		0	0	0.77815125
g		0	2	0.47712125
h		0	0	0.77815125

<b>c)</b>			
TF-IDF (unnormalized)			TF-IDF lengths
a	1.2041	0.602	b
b	0	0	1.70288281
c	1.2041	0.602	d
d	0	0	1.59565347
e	0	0.954	
f	0	0	
g	0	0.954	
h	0	0	

TFIDF (normalized)		
a	0.7071	0.377
b	0	0
c	0.7071	0.377
d	0	0
e	0	0.598
f	0	0
g	0	0.598
h	0	0

<b>d)</b>	diff squared
a	0.1088
b	0
c	0.1088
d	0
e	0.3576
f	0

g	0.3576
h	0

L2 distance	0.9658
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