

University of North Georgia
Mathematics Tournament
April 1, 2017

Solutions for the Afternoon Team Competition

5RXQG

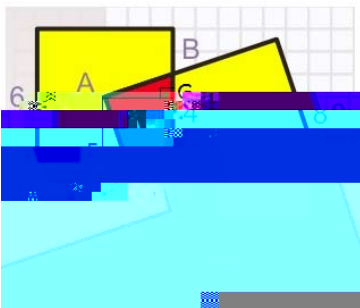
)URP WKH ILJ[√]XUH E~~M~~ORZ 6LPSOLI\|LQJ J~~K~~Y~~X~~HVx DQG WKHQ
x DQG

5RXQG

\$αφ

,I \RX QHHG WKLW GRFXPHQW LQ DQRW#XHQJIRGRDRU ISDGHVH

ORJ yORzJ ORJ ORJ
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\$GGLQJ DOO WKUHHORHTXDYORJQV ØRJJHWORJ ORJ ORJ
7KLV VLP SODIRyH V WRORJDQG WKHQ ~

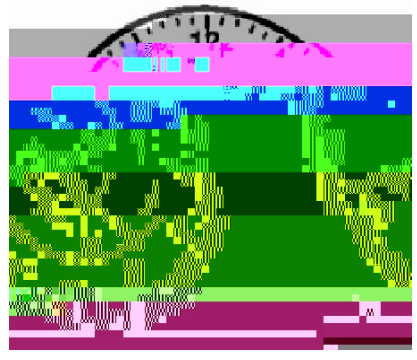


,I \RX QHHG WKLV ~~BB~~ ~~FIRPHQW~~ ~~LQOD~~ ~~ORW#X~~ ~~QD~~ ~~LHG~~ ~~XLQV~~ ~~FD~~ ~~OO~~

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5RXQG



5RXQG

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SRAQ WKLFK LV BQ FX QH QGRHO LDKLG IS RL VQRVQ DVK HF \OW QW HU DUH
FRLQFLGHQW ZKHHQG DB VBA QFKH UH WKHV KVD B B DVKHF OHDOJWM U DG
F\OLQGSHUFWWM O\

6RT r / T6LPSOLI\IRQJ JLX HDVQG $\frac{R}{r}$ § T :KH'Q
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