

PROOF BASICS HW #1

Fill in the blanks to complete the following two proofs:

**$P \& (R \rightarrow S) \vdash R \rightarrow S$**

\_\_\_ (1)  $P \& (R \rightarrow S)$       A

\_\_\_ (\_\_\_)  $(R \rightarrow S)$       \_\_\_\_\_

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**$P, R \rightarrow S \vdash P \& (R \rightarrow S)$**

1 (\_\_\_) P      A

\_\_\_ (2)  $R \rightarrow S$       \_\_\_\_\_

\_\_\_ (3)  $P \& (R \rightarrow S)$       \_\_\_\_\_

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Construct a proof for the following sequent:

**$P, Q \vdash (P \& Q) \vee (A \leftrightarrow B)$**