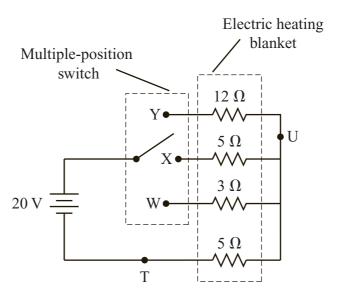


The diagram below shows a simplified schematic for an adjustable electric heating blanket. The switch may be connected to point W, X, or Y depending on the desired level of warmth.



- a. Calculate the current generated in the blanket when the switch is connected to point X. Show your calculations and include units in your answer.
- b. Calculate the power generated in the blanket when the switch is connected to point X. Show your calculations and include units in your answer.
- c. Explain why a fuse at point T would be more effective in this circuit than a fuse at point U.
- d. Identify which point the switch should be connected to in order to generate the most warmth. Explain your answer.