

- 28 Two hydrocarbons,  $R-CH_3$  and  $R'-CH_3$ , react separately with bromine in the presence of ultraviolet light. One of these hydrocarbons is unsaturated.

In each case, free radical substitution reactions occur.

$R$  is  $CH_3CHC(CH_3)$ .

$R'$  is  $CH_3CH(CH_3)CH_2$ .

Which row is correct?

	a propagation stage for the saturated hydrocarbon	a termination stage for the unsaturated hydrocarbon
<b>A</b>	$R-CH_2\cdot + Br\cdot \rightarrow R-CH_2Br$	$R'-CH_2\cdot + Br\cdot \rightarrow R'-CH_2Br$
<b>B</b>	$R-CH_2\cdot + Br_2 \rightarrow R-CH_2Br + Br\cdot$	$R'-CH_2\cdot + Br_2 \rightarrow R'-CH_2Br + Br\cdot$
<b>C</b>	$R'-CH_3 + Br\cdot \rightarrow R'-CH_2\cdot + HBr$	$2R-CH_2\cdot \rightarrow R-CH_2CH_2-R$
<b>D</b>	$2R'-CH_2\cdot \rightarrow R'-CH_2CH_2-R'$	$R-CH_3 + Br\cdot \rightarrow R-CH_2\cdot + HBr$