а) $\left(\sqrt{12}+\sqrt{15}\right)\cdot\sqrt{3}=\sqrt{12}\cdot\sqrt{3}+\sqrt{15}\cdot\sqrt{3}=\sqrt{4\cdot3\cdot3}+$
$+\sqrt{3\cdot5\cdot3}=2\cdot3+3\sqrt{5}=6+3\sqrt{5}$;

б) $\sqrt{5}\left(3\sqrt{5}+5\sqrt{8}\right)=\sqrt{5}\cdot3\sqrt{5}+5\sqrt{5}\cdot\sqrt{8}=3\sqrt{5\cdot5}+$
$+5\sqrt{5\cdot8}=3\cdot5+5\sqrt{4\cdot10}=15+5\cdot2\sqrt{10}=15+10\sqrt{10}$;

в) $\left(4\sqrt{3}-2\sqrt{6}\right)\cdot2\sqrt{3}=4\sqrt{3}\cdot2\sqrt{3}-2\sqrt{6}\cdot2\sqrt{3}=8\cdot3-$
$-2\cdot2\sqrt{3\cdot2\cdot3}=24-4\cdot3\sqrt{2}=24-12\sqrt{2}$;

г) $\left(3\sqrt{5}-2\sqrt{3}\right)\cdot\sqrt{5}+\sqrt{60}=3\sqrt{5}\cdot\sqrt{5}-2\sqrt{3}\cdot\sqrt{5}+$
$+\sqrt{4\cdot15}=3\cdot5-2\sqrt{15}+2\sqrt{15}=15$;

д) $\left(\sqrt{28}-2\sqrt{3}+\sqrt{7}\right)\cdot\sqrt{7}+\sqrt{84}=\sqrt{28}\cdot\sqrt{7}-2\sqrt{3}\cdot\sqrt{7}+$
$+\sqrt{7}\cdot\sqrt{7}+\sqrt{21\cdot4}=\sqrt{4\cdot7\cdot7}-2\sqrt{21}+7+2\sqrt{21}=$
$=7\cdot2+7=21$;

Рассмотрим решение примеров №420 (а, б, в, г, д)

№420 е)

е) $\left(\sqrt{12}+2\sqrt{18}\right)\cdot\sqrt{2}-\sqrt{96}=\sqrt{12}\cdot\sqrt{2}+$
$+2\sqrt{18}\cdot\sqrt{2}-\sqrt{96}=\sqrt{4\cdot3\cdot2}+2\sqrt{9\cdot2\cdot2}-$
$-\sqrt{2^4\cdot3\cdot2}=2\sqrt{6}+2\cdot3\cdot2-2^2\sqrt{6}=2\sqrt{6}+$
$+12-4\sqrt{6}=12-2\sqrt{6}$.

№419(а, б)

а) $\sqrt{8p}-\sqrt{25}+\sqrt{18p}=\sqrt{4\cdot2p}-5+\sqrt{9\cdot2p}=$
$=2\sqrt{2p}-5+3\sqrt{2p}=5\sqrt{2p}-5$;

б) $\sqrt{16c}+2\sqrt{40c}-3\sqrt{90c}=4\sqrt{c}+2\sqrt{4\cdot10c}-$
$-3\sqrt{9\cdot10c}=4\sqrt{c}+2\cdot2\sqrt{10c}-3\cdot3\sqrt{10c}=4\sqrt{c}+$
$+4\sqrt{10c}-9\sqrt{10c}=4\sqrt{c}-5\sqrt{10c}$;