KEY

Math 20-1

LO – LQ – 5.2 Multiplying Radical Expressions (Part 1)

Q1: Simplify each expression *(1 mark each)*

$(3\sqrt{6})(2\sqrt{3})$

$6\sqrt{18}$

$6\sqrt{2\cdot 3^2}$

$6\cdot 3\sqrt{2}$

$\boxed{18\sqrt{2}}$

18 → 2, 9 → 3, 3

$(2-3\sqrt{5})(2\sqrt{5}+1)$

$4\sqrt{5}+2-6\sqrt{25}-3\sqrt{5}$

$4\sqrt{5}+2-6(5)-3\sqrt{5}$

$-28+1\sqrt{5}$

$\boxed{-28+\sqrt{5}}$

Q2: The expression $(\sqrt{6})(\sqrt{3})+(\sqrt{10})(\sqrt{5})$ simplifies to $a\sqrt{b}$, where ***a*** and ***b*** are ___ and ___.

*(Record your **two-digit** answer in the Numerical Response boxes below)*

8	2		

$\sqrt{18}+\sqrt{50}$

$\sqrt{2\cdot 3^2}+\sqrt{2\cdot 5^2}$

$3\sqrt{2}+5\sqrt{2}$

$8\sqrt{2}$

$a\sqrt{b}$ $\quad a=8$, $b=2$

18 → 2, 9 → 3, 3

50 → 2, 25 → 5, 5

MARKING:

Beginning	0.0 – 1.0
Progressing	1.5
Competent	2.0 – 2.5
Exemplary	3.0