Name:_____ Date:_____

Math 9 Section 1.2 Square Roots of Non Perfect Squares

1. Given each of the following non-perfect squares, find the PS that is closest to it:

a) 23	b) 129	c) 91	d) 115
e) 91	f) 385	g) 75	h) 186
i) 57	j) 228	k) 391	l) 513

2. Estimate the following roots and draw it on a number line:

a) $\sqrt{18}$	b) $\sqrt{38}$	c) $\sqrt{93}$
d) $\sqrt{73}$	e) $\sqrt{29}$	f) $\sqrt{58}$
g) $\sqrt{118}$	h) $\sqrt{168}$	i) $\sqrt{288}$

3. Approximate each of the following square roots:

a) $\sqrt{\frac{17}{26}}$	b) $\sqrt{\frac{10}{37}}$	c) $\sqrt{\frac{99}{65}}$

d) $\sqrt{\frac{120}{79}}$	e) $\sqrt{\frac{195}{167}}$	f) $\sqrt{\frac{101}{290}}$

4. Use any strategy to estimate the value of each square root. Try to find a common factor to estimate the roots.

a) $\sqrt{\frac{17}{1000}}$	b) $\sqrt{\frac{18}{60}}$	c) $\sqrt{\frac{27}{40}}$
d) $\sqrt{\frac{10}{45}}$	e) $\sqrt{\frac{21}{65}}$	f) $\sqrt{\frac{529}{100}}$
g) $\sqrt{0.000080}$	h) $\sqrt{0.0119}$	i) $\sqrt{0.0257}$
j) $\sqrt{2.90}$	k) $\sqrt{0.0145}$	L) $\sqrt{0.000626}$