

Name: key

Block: _____

Date: _____

Review – Estimating Square Roots

Complete the table below to estimate the square roots of the following numbers.

Number	Closest		Closest		Distance from lesser perfect square to number	Distance from lesser to greater perfect square	Fraction	Estimate
	Lesser perfect square	Square root of lesser perfect square	Greater perfect square	Square root of greater perfect square				
11	9	$\sqrt{9} = 3$	16	$\sqrt{16} = 4$	$11 - 9 = 2$	$16 - 9 = 7$	$\frac{2}{7}$	$\sqrt{11} \approx 3 + \frac{2}{7} \approx 3.3$
23	16	$\sqrt{16} = 4$	25	$\sqrt{25} = 5$	$23 - 16 = 7$	$25 - 16 = 9$	$\frac{7}{9}$	$\sqrt{23} \approx 4 + \frac{7}{9} \approx 4.8$
5	4	$\sqrt{4} = 2$	9	$\sqrt{9} = 3$	$5 - 4 = 1$	$9 - 4 = 5$	$\frac{1}{5}$	$\sqrt{5} = 2 + \frac{1}{5} = 2.2$
28	25	$\sqrt{25} = 5$	36	$\sqrt{36} = 6$	$28 - 25 = 3$	$36 - 25 = 11$	$\frac{3}{11}$	$\sqrt{28} = 5 + \frac{3}{11} = 5.3$
46	36	$\sqrt{36} = 6$	49	$\sqrt{49} = 7$	$46 - 36 = 10$	$49 - 36 = 13$	$\frac{10}{13}$	$\sqrt{46} = 6 + \frac{10}{13} = 6.8$
77	64	$\sqrt{64} = 8$	81	$\sqrt{81} = 9$	$77 - 64 = 13$	$81 - 64 = 17$	$\frac{13}{17}$	$\sqrt{77} = 8 + \frac{13}{17} = 8.8$
115	100	$\sqrt{100} = 10$	121	$\sqrt{121} = 11$	$115 - 100 = 15$	$121 - 100 = 21$	$\frac{15}{21}$	$\sqrt{115} = 10 + \frac{15}{21} = 10.7$