

Reasoning and Problem Solving Three Decimal Places

Developing

1a.

	2.05
2.51, 2.91	2.11

One box is empty as none of the numbers are greater than 2.5 with a value greater than 2 in the hundredths column.

2a. Various answers, for example:

4.61, 4.71, 4.81, 4.91, 5.01

3a. B: 5.52; the others describe 5.25.

Expected

4a.

1.901, 1.909	
	1.665, 1.799

Two boxes are empty because none of the numbers that are > 1.856 have a value of < 8 in the tenths column, and none that are < 1.856 have a value of > 8 in the tenths column.

5a. Various answers, for example:

2.853, 2.854, 2.855, 2.856, 2.857, 2.858, 2.859, 2.863, 2.864, 2.865, 2.866, 2.867

6a. D: 7.039; the others describe 7.039

Greater Depth

7a.

5.073, 5.9	5.057
	5.007

There is one empty box because no numbers can be > 5.069 if they have less than 5,040 thousandths (5.04).

8a. Various answers, for example:

8.849, 8.859, 8.869, 8.879, 8.889, 8.899, 8.949, 8.959, 8.969, 8.979, 8.989, 8.999

9a. C: 45.29; the others describe 4.529

Reasoning and Problem Solving Three Decimal Places

Developing

1b.

1.09, 1.19	0.99
10.01	

One box is empty as none of the numbers are less than 1 with a value less than 8 in the hundredths.

2b. Various answers, for example:

20.54, 20.64, 20.74, 20.84, 20.94, 20.65, 20.75, 20.85, 20.95, 20.76, 20.86, 20.96,

3b. B: 24.7; the others describe 24.07.

Expected

4b.

9.906	
9.609	8.665, 8.609

One box is empty because none of the numbers that are < 8.7 have a value of > 7 in the tenths column.

5b. Various answers, for example:

5.901, 5.902, 5.903, 5.904, 5.905, 5.906, 5.907, 5.908, 5.909

6b. D: 20.47; the others describe 20.047

Greater Depth

7b.

0.787, 0.955	
	0.588, 0.599

There are two empty boxes because no numbers can be < 0.679 , if they have more than 60 hundredths (0.6). Nor can they be > 0.679 if they have less than 600 thousandths (0.6).

8b. Various answers, for example:

8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 10.3, 10.4, 10.5

9b. B: 23.54; the others describe 23.054