

Batch 51efde39

Accuracy Counts

Version 1

Round answer to 3 decimals.

$$\frac{19}{26} + \frac{92}{175} + \frac{44}{91} = \boxed{}$$

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Version 2

Round answer to 3 decimals.

$$\frac{27}{68} + \frac{156}{175} + \frac{93}{119} = \boxed{}$$

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Version 3

Round answer to 3 decimals.

$$\frac{31}{68} + \frac{11}{35} + \frac{69}{119} = \boxed{}$$

name

date

period

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Version 4

Round answer to 3 decimals.

$$\frac{25}{34} + \frac{71}{175} + \frac{57}{119} = \boxed{}$$

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Version 5

Round answer to 3 decimals.

$$\frac{15}{26} + \frac{2}{35} + \frac{6}{91} = \boxed{}$$

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Version 6

Round answer to 3 decimals.

$$\frac{15}{44} + \frac{37}{175} + \frac{26}{77} = \boxed{}$$

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Version 7

Round answer to 3 decimals.

$$\frac{31}{68} + \frac{78}{175} + \frac{1}{119} = \boxed{}$$

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Version 8

Round answer to 3 decimals.

$$\frac{8}{17} + \frac{47}{75} + \frac{44}{51} = \boxed{}$$

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Version 9

Round answer to 3 decimals.

$$\frac{5}{68} + \frac{5}{7} + \frac{55}{119} = \boxed{}$$

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Version 10

Round answer to 3 decimals.

$$\frac{5}{11} + \frac{106}{175} + \frac{20}{77} = \boxed{}$$

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Version 11

Round answer to 3 decimals.

$$\frac{12}{13} + \frac{23}{175} + \frac{46}{91} = \boxed{}$$

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Version 12

Round answer to 3 decimals.

$$\frac{9}{34} + \frac{97}{175} + \frac{62}{119} = \boxed{}$$

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Version 13

Round answer to 3 decimals.

$$\frac{7}{22} + \frac{113}{175} + \frac{69}{77} = \boxed{}$$

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Version 14

Round answer to 3 decimals.

$$\frac{7}{13} + \frac{11}{35} + \frac{68}{91} = \boxed{}$$

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Version 15

Round answer to 3 decimals.

$$\frac{35}{52} + \frac{71}{175} + \frac{72}{91} = \boxed{}$$

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Version 16

Round answer to 3 decimals.

$$\frac{33}{34} + \frac{136}{175} + \frac{80}{119} = \boxed{}$$

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Version 17

Round answer to 3 decimals.

$$\frac{4}{11} + \frac{148}{175} + \frac{27}{77} = \boxed{}$$

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Version 18

Round answer to 3 decimals.

$$\frac{11}{26} + \frac{33}{175} + \frac{59}{91} = \boxed{}$$

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Version 19

Round answer to 3 decimals.

$$\frac{43}{52} + \frac{2}{15} + \frac{23}{39} = \boxed{}$$

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Version 20

Round answer to 3 decimals.

$$\frac{6}{17} + \frac{17}{75} + \frac{50}{51} = \boxed{}$$

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Accuracy Counts

Version 21

Round answer to 3 decimals.

$$\frac{25}{68} + \frac{41}{175} + \frac{20}{119} = \boxed{}$$

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Version 22

Round answer to 3 decimals.

$$\frac{45}{68} + \frac{121}{175} + \frac{2}{119} = \boxed{}$$

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Accuracy Counts

Version 23

Round answer to 3 decimals.

$$\frac{1}{68} + \frac{67}{175} + \frac{11}{119} = \boxed{}$$

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Accuracy Counts

Version 24

Round answer to 3 decimals.

$$\frac{7}{13} + \frac{87}{175} + \frac{55}{91} = \boxed{}$$

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Batch 51efde39

Accuracy Counts

Version 25

Round answer to 3 decimals.

$$\frac{15}{34} + \frac{146}{175} + \frac{41}{119} = \boxed{}$$

V. 1	V. 2	V. 3	V. 4	V. 5	V. 6	V. 7	V. 8	V. 9	V. 10	V. 11
1.740	2.070	1.350	1.620	0.700	0.890	0.910	1.960	1.250	1.320	1.560
V. 12	V. 13	V. 14	V. 15	V. 16	V. 17	V. 18	V. 19	V. 20	V. 21	
1.340	1.860	1.600	1.870	2.420	1.560	1.260	1.550	1.560	0.770	
V. 22		V. 23		V. 24		V. 25				
1.370		0.490		1.640		1.620				

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Teachable Moment

So how do we always get answers that require only 2 decimals?

Our problem is of the form

$$\frac{a}{4p} + \frac{b}{25q} + \frac{c}{pq} = \frac{25aq + 4bp + 100c}{100pq}$$

where $p \in \{11, 13, 17\}$ and $q \in \{3, 7\}$. Note that 4, 25, p and q are all relatively prime. The fractions are displayed in simplified form so the pattern may not be obvious.

For any whole numbers a and b (chosen at random) there will exist a unique $c < pq$ such that

$$25aq + 4bp + 100c$$

will be evenly divisible by pq , and any number divided by 100 takes at most 2 decimals.

Taking the modulo with respect to pq gives us

$$\text{mod}_p(25a) + \text{mod}_q(4b) + \text{mod}_{pq}(100c) = 0$$

which has a solution that is most easily found by trying all possible values for c .

It should be noted that if a is evenly divisible by p and b is evenly divisible by q , the solution will be $c = 0$, so these values are excluded.