

Titles of Problem Sets for MonumentalMath.com in the Category of Math Foundations, Fall, 2015

Problem Set Titles	No. of Sets	Math Topic(s) or Example, Level of Difficulty from 1st set to last set	In This/These Chapter(s)....	When?
Match Them, With Sums Through 10	5	Addition, $2 + _ = 6$ matches $4 + _ = 8$ $_ + 3 = 8$ matches $4 + _ = 9$		
Match Them, With Sums Through 12	5	Addition, $4 + _ = 5$ matches $7 + _ = 8$ $4 + _ = 12$ matches $_ + 1 = 9$		
Match Them, With Sums Through 18	5	Addition, $13 + _ = 16$ matches $_ + 2 = 5$ $_ + 12 = 18$ matches $8 + _ = 14$		
Match Them, With Sums Through 20	5	Addition, $7 + _ = 11$ matches $15 + _ = 19$ $4 + _ = 16$ matches $_ + 8 = 20$		
Adding Doubles	6	Addition, $3 + 3 =$, $23 + 23 =$		
Mental Math - Addition	6	Addition with compatible numbers, $4 + 3 + 6 =$, $48 + 27 + 12 =$		
Adding Doubles, Plus 1	6	Addition, $7 + 8 =$, $22 + 23 =$		
Take It, Break It, Remake It	6	Addition, look for a way to make compatible nos. $18 + 5 =$, $356 + 25 =$		
Something Is Missing	2	Count forward to the next multiple of 10, then more, $17 + _ = 23$, $18 + _ = 25$		
Adding, With Sums of 50	6	Addition, counting forward to the next multiple of 10, then more, $25 + _ = 50$, $17 + _ = 50$		
Adding, With Sums of 100	6	Addition, counting forward to the next multiple of 10, then more, $20 + _ = 100$, $_ + 31 = 100$		
Total Value of Coins	3	Find the value of.... 3 nickels & 6 pennies, 3 quarters & 2 dimes & 4 nickels		
Change From a \$1 Bill	6	When you spent... 15 cents, 87 cents		
Change From a \$5 Bill	6	When you spent... \$2.25, \$3.52		
Change From a \$10 Bill	6	When you spent... \$7.25, \$3.64		

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Problem Set Titles	No. of Sets	Math Topic(s) or Example, Level of Difficulty from...to...	In This/These Chapter(s)....	When?
Round to the Nearest 10	4	Rounding, 83, 349		
Round to the Nearest 100	4	Rounding, 234, 5,907		
Round to the Nearest 1,000	4	Rounding, 3,282; 18,945		
Multiplication, Using Mental Math	6	Look for clever combinations, $4 \cdot 13 \cdot 25$, $0.02 \cdot 24 \cdot 50$		
Yearly Salary	4	Using multiples of 12, earnings per month were \$40, \$3,500		
Tank of Gas	2	Rounding to be able to use mental math, went 211 miles on 7 gallons of gas, went 149 on 15.1 gallons of gas		
DEFT ~ Distance Equals Rate * Time	3	Use formula and mental math, rate of 60 mph for 8 hrs, find rate for distance of 99 m covered in 11.2 seconds		
Using the Distributive Property	3	Applying distributive property, $3 \cdot 12$, $9 \cdot 43$		
The Factors of...	6	List all the factors of... 18, 480 has these 4 factors		
Greatest Common Factor	2	Find the GCF for 2 & 20, 48 & 80		
Lowest Common Multiple	3	Find the LCM for 2 & 8, 45 & 180		
Prime Factorization	6	Find the prime factorization for 20, 75 and the reverse: What number has this prime factorization: $2 \cdot 3 \cdot 5^2$, $2^3 \cdot 5^2 \cdot 7$		
Find the GCF, Using Prime Factorization	4	Practise finding prime factorization, analyzing and drawing conclusions, for 8 & 20, for 240 & 225		
Find the LCM, Using Prime Factorization	3	Practise finding prime factorization, analyzing and drawing conclusions, for 8 & 20, for 55 & 120		

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Problem Set Titles	No. of Sets	Math Topics	Chapter(s)....	When?
Divide and Double	5	Converting the problem to an easy mental math problem, find $24 * 5$, find $0.024 * 5$		
Fractions - Simplify Completely	10	Simplifying, $3/12$, $150/275$		
Order Up	6	Arranging fractions from least to greatest, $3/8$ & $1/4$ & $5/6$, $9/36$ & $15/45$ & $8/80$		
Addition of Fractions With Like Denominators	6	Adding & simplifying, $1/6 + 1/6$, $17/90 + 3/90$		
Addition of Fractions With Like or Unlike Denominators	7	Converting to like denominators, adding & simplifying, $3/4 + 1/8$, $25/48 + 3/4$		
Cut It In Half	10	Using mental math to easily 'cut it in half', cut 86 in half, Cut 0.03 in half		
Multiplication of Fractions	6	Analyzing, multiplying, simplifying, $3/4 * 4/9$, $9/96 * 12/18$		
Multiplication With a Fraction - Be Clever!	2	Convert the problem to be able to use mental math, $1/2 * 9 * 16$, $36 * 5 * 2/3$		
P.O.P. - A Portion of a Portion	3	Analyzing & using mental math, find $1/4$ of $1/5$ of 100, $2/3$ of $3/4$ of 80		
Close Enough! Finding a Fraction of a Number	3	Convert the problem to be able to use mental math, $1/2$ of 139, $3/8$ of 42		
Converting Mixed Numbers to Improper Fractions	2	$2 \frac{5}{6} = ?$, $9 \frac{6}{7} = ?$		
Converting Improper Fractions to Mixed Numbers	2	$8/3 = ?$, $42/5 = ?$		
Division of a Whole Number by a Fraction	2	$6 \div 2/3$, $36 \div 3/4$		

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Converting Common Fractions to Decimals	10	Look for patterns, convert, $3/4 = ?$, $8/20 = ?$		
Converting Fractions to Decimals	10	Simplify to a common fractions and convert, $6/30$, $140/180$		
Converting Fractions to Percents	2	Convert from a fraction to a decimal to a percent, $3/8$, $9/24$		
Find 10% or 20% of a Number	4	View as a mental math problem, find 10% of 200, Find 20% of 780		
Find 25% or 50% or 75% of a Number	4	View as a mental math problem, find 25% of 44, find 75% of 320		
Find a Percent of a Number	4	Convert to a mental math problem, find 20% of 150, find 15% of 80		
Find a Percent, Larger Than 100%, of a Number	2	Convert to a mental math problem, find 125% of 400, find 320% of 50		
Close Enough! Finding a Percent of a Number	4	Convert problem to a mental math problem, find 10% of 91, find 25% of 49		
This Is What Percent of That?	2	Use the 2 numbers to make a fraction, then convert to a decimal and to a percent, 3 is what % of 12?, 24 is what % of 60?		
Find the Mean	2	For 3, 3, 4, 6 For 4, 4.5, 5, 4.1		
Find the Median	2	For 3, 5, 8, 7, 6 For 3, 5, 6, 12		
Find the Mode	2	For 3, 41, 3, 17 For 4, 4.2, 7		
How Tall Is That? (ft. & in.)	5	$15" = ?\text{ft.}?in.$ Or $3'8" = ?"$ Or $5\frac{2}{3}' = ?\text{inches}$		

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Time Conversions	2	400sec. = _ min or 2 1/2 hours = _ min or 6 wks = + days or 12 3/4 hrs = _ min, 140 days = _ wks		
Metric Conversions - Length	3	6.5 m = _ cm 4.04 km = _ hm		
Weight Conversions - Customary Units	2	164 oz = _ lbs. or 4 1/2 lbs. = _ oz. or 5,000 lbs. = _ tons		
Volume Conversions - Customary Units	3	3 c. = _ pints, or 6 1/2 qts = _ cups or 40 oz. = _ c. or 3 pints = _ oz.		
Rounding Decimals to the Nearest Tenth	4	Round 0.07 10.995		
Rounding Decimals to the Nearest Hundredth	4	Round 2.531 6.8496		
Decimal Addition, With Sums of 1	4	0.25 + _ = 1 0.83 + _ = 1		
Decimal Addition, With Sums of 10	4	2.4 + _ = 10 5.19 + _ = 10		
Do the Math - Adding Integers	10	4 + _ = - 6 - 12 + _ 3		
Subtracting With Negative Integers	2	- 6 - 4 7 - (-9) - 4		
Maybe It's Negative	2	(3*6)/(-9) 48 ÷ (3*(-4))/(-2)		
Order of Operations	4	6 + (3 + 5) ² 60 ÷ (4 + 4 ²) * 3		
Find a Fraction of a Negative Number	3	2/3 of - 36 3/4 (- 48)		
Working With Absolute Values	2	4 + (- 9) 8 - - 3 * 5		
Exponents	6	Evaluate 4 ² 8 ² - 2 ²		
Between Which Two Positive Consecutive Integers?	2	Analyze and decide $\sqrt{23}$ $\sqrt{350}$		
Sums of Square Roots	3	$\sqrt{36} + \sqrt{144}$ $\sqrt{225} + \sqrt{121}$		
Sums and Differences of Square Roots	2	$\sqrt{169} - \sqrt{49}$ $\sqrt{400} + \sqrt{64}$		