Speed Work: Level Three

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Mastery Goals

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Cross Multiply: Level Three: 20 problems

$\dfrac{2}{3} = \dfrac{x}{6}$	$\dfrac{3}{4} = \dfrac{x}{16}$	$\dfrac{2}{9} = \dfrac{x}{18}$	$\dfrac{4}{5} = \dfrac{x}{20}$	$\dfrac{3}{2} = \dfrac{x}{8}$
$\dfrac{1}{6} = \dfrac{x}{12}$	$\dfrac{1}{10} = \dfrac{x}{50}$	$\dfrac{7}{3} = \dfrac{x}{9}$	$\dfrac{7}{2} = \dfrac{x}{4}$	$\dfrac{9}{4} = \dfrac{x}{12}$
$\dfrac{2}{5} = \dfrac{x}{30}$	$\dfrac{2}{11} = \dfrac{x}{22}$	$\dfrac{4}{9} = \dfrac{x}{18}$	$\dfrac{3}{4} = \dfrac{x}{8}$	$\dfrac{3}{5} = \dfrac{x}{10}$
$\dfrac{1}{9} = \dfrac{3x}{27}$	$\dfrac{1}{5} = \dfrac{4x}{10}$	$\dfrac{2}{3} = \dfrac{8x}{12}$	$\dfrac{4}{7} = \dfrac{x}{14}$	$\dfrac{6}{7} = \dfrac{x}{21}$

Distributive Property: Level Three: 16 problems

$2(x+2)=$	$9(3x+3)=$	$5(x+4)=$	$6(2x+4)=$
$3(3x-6)=$	$6(6-2x)=$	$2(x-1)=$	$2(-x-2)=$
$-7(x-3)=$	$-3(2x+1)=$	$-2(x+1)=$	$-8(5-2x)=$
$-3(7x+2)=$	$-4(x-2)=$	$-2(2x-1)=$	$-5(-5x+1)=$

One Variable Problems: Level Three: 16 problems

$x + 7 = 12$	$5x - 5 = 10$	$x - 9 = 2$	$15 - x = 3$
$3x - 2 = 10$	$4x + 9 = 11$	$4x - 6 = 10$	$8x + 2 = 10$
$14 - x = 5$	$20 - x = 10$	$2x - 4 = 8$	$24 - 2x = -6$
$2 + 2x = 10$	$4 - 6x = 10$	$2 - 8x = 26$	$2 - 8x = 6$

Multiplying Fractions:

Level Three: 12 problems

Multiply & Reduce.

$\frac{1}{4} \times \frac{2}{3}$	$\frac{2}{5} \times \frac{2}{7}$	$\frac{3}{8} \times \frac{3}{5}$	$\frac{5}{12} \times \frac{3}{4}$
$\frac{5}{9} \times \frac{2}{11}$	$\frac{8}{9} \times \frac{3}{10}$	$\frac{6}{7} \times \frac{7}{6}$	$\frac{6}{5} \times \frac{3}{7}$
$\frac{3}{7} \times \frac{9}{4}$	$\frac{4}{7} \times \frac{6}{9}$	$\frac{4}{5} \times \frac{8}{9}$	$\frac{2}{5} \times \frac{7}{8}$

Fraction Arithmetic: Level Three: 8 problems

Multiply & Reduce.

$\dfrac{3}{4} - \dfrac{2}{3}$	$\dfrac{1}{4} + \dfrac{2}{3}$	$\dfrac{1}{9} + \dfrac{1}{3}$	$\dfrac{4}{7} + \dfrac{3}{4}$
$\dfrac{5}{6} + \dfrac{1}{2}$	$\dfrac{5}{8} + \dfrac{1}{3}$	$\dfrac{5}{6} - \dfrac{1}{4}$	$\dfrac{8}{9} - \dfrac{1}{5}$

Negative Numbers: Level Three: 12 problems

$-4 + 5 =$	$-4 - 5 =$	$10 - -5 =$	$-10 + -5 =$
$2 + -5 =$	$-5 + -5 =$	$-5 - -5 =$	$-6 + 6 =$
$-9 + 6 =$	$-9 - 6 =$	$-2 - 4 =$	$-2 - -4 =$

The product of x and two more than y .	The sum of twice x and 35.	The quotient of 5 less than x and 7.	Four times the difference between x and y
16 less twice the difference between x and y.	45 more than y squared.	The product of $\frac{1}{2}y$ and 12 less than x.	The quotient of one − fourth of x and y cubed.

Answer Key   Level Three

Cross Multiply

4	12	4	16	12
2	5	21	14	27
12	4	8	6	6
1	0.5	1	8	18

Distributive Property

$2x + 4$	$27x + 27$	$5x + 20$	$12x + 24$
$9x - 18$	$36 - 12x$	$2x - 2$	$-2x - 4$
$-7x + 21$	$-6x - 3$	$-2x - 2$	$-40 + 16x$
$-21x - 6$	$-4x + 8$	$-4x + 2$	$25x - 5$

One Var. Problems

5	3	11	12
4	$\frac{1}{2}$	4	1
9	10	6	15
4	-1	-3	$-\frac{1}{2}$

Multiply Fractions

$\frac{1}{6}$	$\frac{4}{35}$	$\frac{9}{40}$	$\frac{5}{16}$
$\frac{10}{99}$	$\frac{4}{15}$	1	$\frac{18}{35}$
$\frac{27}{28}$	$\frac{8}{21}$	$\frac{32}{45}$	$\frac{7}{20}$

Fraction Arithmetic

$\frac{1}{12}$	$\frac{11}{12}$	$\frac{4}{9}$	$\frac{37}{28}$
$\frac{4}{3}$	$\frac{23}{24}$	$\frac{7}{12}$	$\frac{31}{45}$

Negative Numbers

1	-9	15	-15
-3	-10	0	0
-3	-15	-6	2

Translating Word Problems

$x \cdot (2 + y)$	$2x + 35$	$\frac{x - 5}{7}$	$4(x - y)$
$2(x - y) - 16$	$y^2 + 45$	$\frac{1}{2}y(x - 12)$	$\frac{\frac{1}{4}x}{y^3}$