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|  |
| Essential Question | What does it mean? |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Fraction EQUATIONS**

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 Steps for solving equations

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 How do we solve an equation with a fraction **coefficient** (in front of the variable)?

 Without the calculator

Example 1:

½***x*** = 5 *This is the same as:* ***x*** = 5



 So, when we divide by any fraction, we flip and multiply it to get an answer of “1”.

Example 2: ***x*** +   = 5

* Example 3 : $\frac{2}{3}x+\frac{1}{3}=\frac{7}{3}x-\frac{4}{3}$

Example 4 -5*a* +  = -12

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**Solving Fraction Equations**

 Class Work

1. $\frac{7}{5}q+\frac{2}{10}=\frac{2}{5}$ 2. $-1t+\frac{7}{8}=\frac{2t}{4}+\frac{5}{2}$

$3. -\frac{3}{7}w+\frac{1}{7}=\frac{4}{7}w-\frac{6}{7}$ 4 $-\frac{3}{2}b=-\frac{9}{2}$

$5. -\frac{3}{2}b+\frac{5}{4}=\frac{-3}{4}b-\frac{7}{2}$ 6. Which step would **not** be a possible first step for solving this equation algebraically?
 $\frac{2}{3}\left(2x-1\right)+2\frac{1}{3}=7+\frac{1}{2}x$

1. multiplying both sides of the equation by six
2. subtracting $2\frac{1}{3}$ from 7
3. subtracting $\frac{1}{2}x$ from 2*x*
4. multiplying 2*x* and –1 by $\frac{2}{3}$

 Enrichments Activities

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| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Solving Equations with Fractions |
| Lesson #7 | Homework |

***Directions: Solve***

1. -5 = ¼*d*
2. 6 = *a* - ¾
3. -2 = *k* + 5
4. $-p+\frac{2}{3}=-\frac{2}{9}p$
5. $$-\frac{5}{3}j+\frac{2}{3}=\frac{1}{3}j$$
6. $-b+\frac{2}{10}=\frac{2}{5}b$

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Do Now

Directions: Solve the following equations without a calculator

1. 8 = 4*x* + 6
2. 10(*x* – 6) = 4*x*
3. 2 = 2*m* – 2 – *m*
4. 3(3 - 10*n*) = -51