

***** 7th Grade Skill Homework- CHEAT SHEET *****

1. Integers Operation (7.3b)		2. Fractions Operation (7.3b)		3. Decimals Operation (7.3b)	
<u>Addition Rules</u> Same sign: Just add and keep the sign Different signs: Subtract and keep the sign of the largest absolute value	<u>Subtraction Rule</u> Add the opposite 1. Change the subtraction sign to addition 2. Change the sign of the second number 3. Follow addition rules!	<u>Adding and Subtracting Fractions</u> You must have a common denominator! Add or subtract the numerator only and keep denominator the same.		<u>Adding and Subtracting Decimals</u> LINE UP THE DECIMALS! Add zeros if necessary. (3 is 3.0) Then just add and subtract like normal.	
<u>Multiplication Rules</u> Same sign answer is positive Different sign answer is negative	<u>Division Rules</u> Same sign answer is positive Different sign answer is negative	<u>Multiplying Fractions</u> Multiply numerator times numerator Denominator times denominator	<u>Dividing Fractions</u> Multiply by the reciprocal	<u>Multiplying Decimals</u> You do not need to line up, just set up like regular multiplication. Count how many numbers are to the right of each decimal, this how many times you will move the decimal to the left for your answer.	<u>Dividing Decimals</u> The divisor can't be a decimal (the number outside), make it a whole number by moving the decimal to the right, then move the decimal the same number of places in the dividend. Decimal goes straight up in your answer.
4. Order of Operation (7.3b)				5. Percent/Ratio/Rate (7.4b,d)	
PEMDAS Do the operation(s) in <u>P</u> arentheses first. Do all <u>E</u> xponents <u>M</u> ultiply or <u>D</u> ivide (order from left to right) <u>A</u> dd or <u>S</u> ubtract (order from left to right)				<u>Percent Equation:</u> Part=%(whole) Percent must be in decimal form.	<u>Sales Tax:</u> Find the amount of tax by multiplying \$ by % as decimal. Add this back to \$.
				<u>Unit Rate:</u> Finding one unit. Set up a proportion.	<u>Percent Change:</u> See Below
6. Equation Models		7. Fractions/Decimals/Percent		8. Algebraic Relationship	
Evaluate means to substitute in the given values and solve.		Fraction to Decimal	Divide	$k=\frac{y}{x}$	
		Decimal to Percent	Move decimal 2 places to the left and add percent sign	9. Equations (7.11a)	
		Percent to Decimal	Move decimal 2 places to right and remove percent sign	Your goal is to figure out what number the variable can be to make the equation true. To do this, you must isolate the variable. Use the inverse operation (+ or -) with the constant to make a zero pair. Then use the inverse operation (• or ÷) with the coefficient. Whatever you do to one side of the equation, you must do to the other side.	
		Decimal to Fraction	Put number over its place value and simplify		
<u>Percent Change:</u> Find the percent of increase from 4 to 7.5. <div>Amount of Increase3.5</div> <div>Original Amount4</div> Remember to convert your decimal answer to a percent by moving the decimal 2 places to the right.				10. Inequalities (7.11a) Your goal is to figure out what number(s) the variable can be to make the inequality true. Follow the same rules as Equations. To graph: ≤ (closed dot and shade left) < (open dot and shade right) ≥ (closed dot and shade right) > (open dot and shade right)	

