$\qquad$ Period $\qquad$
Review of Digits Units 1, 2, 3, 4 \& 5 \& 12

| Problem \# Problem \# ___ |  |
| :--- | :--- |


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## 1a. $2 n+2=12$

$$
\text { 1b. } 2(r+3)=24
$$

$$
\text { 1c. } 3(2 r-6)=48
$$

2 a .

| $x$ | $y=2 x+4$ |
| :--- | :--- |
| 0 |  |
| 3 |  |
| 7 |  |

$2 b$.

2c.

| $x$ | $y=-4 x-2$ |
| :---: | :---: |
| 0 |  |
| 2 |  |
| 6 |  |
| $x$ | $y=\frac{1}{2} x+\frac{3}{4}$ |
| 0 |  |
| 4 |  |
| 6 |  |

3a. $a^{2}+6^{2}=10^{2}$

3b. $8^{2}+8^{2}=c^{2}$

3c. $\quad 1.6^{2}+1.2^{2}=c^{2}$

4a. Put the number into Scientific Notation

## 4,800,000,000

4b. Simplify and leave in Scientific Notation

$$
\left(4.6 \times 10^{6}\right)+\left(8 \times 10^{6}\right)
$$

4C. Simplify and leave in Scientific Notation

$$
\left(3.2 \times 10^{6}\right)\left(4 \times 10^{4}\right)
$$

## 5a. Simplify <br> $$
x^{3} \cdot x^{-5}
$$

5b. Simplify

$$
\left(3 x^{3} y^{6}\right)\left(4 x^{-6} y^{2}\right)
$$

5c.
Simplify

$$
\frac{12 x^{2} y^{8}}{4 x^{4} y^{3}}
$$

## $6 a$. $2 a-8=a+7$

$$
\text { 6b. } 4(b-3)=2 b-12
$$

6c. $\quad 3.6 y=5.4+3.3 y$

# 7a. A machine can make 64 cans in 8 minutes. What is the unit rate? 

# 7b. A machine can make 7 six packs of soda in 4 minutes. What is the unit rate? 

7C. A machine can make 90 cans in 7.5 minutes. What is the unit rate?

8a. $\frac{x}{4}=\frac{18}{24}$


9a. A car travels at a constant rate of 55 miles per hour. How far does it go after 6 hours?

9b. A car travels at a constant rate of 58.5 miles per hour. How far does it go after 3.5 hours?

9c. A car travels at a constant rate of 42.5 miles per hour. How far does it go after 1.8 hours?

10a. Eva buys a new outfit that costs $\$ 150$. If sales tax is $9 \%$, how much does she pay?

10b. Emmy buys a pair of shoes that cost $\$ 125$. If sales tax is $8.5 \%$, how much does she pay?

10c. Johnrey buys a new phone that costs $\$ 350$. It is on sale $20 \%$ off. If sales tax is $9 \%$, how much does he pay?

# 11a. Make a table for the equation $y=2 x-3$ 

11b. Make a table for the equation
$y=\frac{2}{3} x+2$

11c. Make a table for the equation $y=-\frac{5}{7} x-4$

12a. What is the slope and $y-$
intercept of the equation $y=3 x+4$

12b. What is the slope and $y$ -
intercept of the equation $y=\frac{3}{5} x-2$

12c. What is the slope and $y$ -
intercept of the equation $y=-\frac{x}{2}+\frac{1}{3}$

13a. Draw a graph with a positive slope.

13b. Draw a graph with an infinite
slope.

13c. Draw a graph with slope of $-\frac{3}{4}$

14a. Is the graph shown proportional?


14 b . What is the slope and y intercept of the line shown?

14c. What is the equation of the line shown?

Instructions:
I post each sheet of 3 problems around the room and give each student an answer sheet. Students work with a partner and rotate among the 10 sheets of problems, choosing one problem from each sheet to complete. I ask them to challenge themselves to complete the "hardest" problem on each sheet if they are able.

