## Station A

1. Write each number in expanded form.
a) 4 billion
b) $3.2 \times 10^{5}$
c) 8.2 million
d) $2.5 \times 10^{-4}$
2. Write each number in scientific notation.
a) $\mathbf{7 . 6 2 \text { million }}$
b) 0.0000015
c) 437
d) 843200
3. Place these numbers from least to greatest.
a) $5,-3,-7,2,0,14$
b) $\frac{1}{3}, \frac{1}{5}, \frac{1}{7}, \frac{1}{8}, \frac{1}{2}, \frac{1}{10}$
c) $\sqrt{5},-\sqrt{3}, \sqrt{2},-\sqrt{7}, \sqrt{10},-\sqrt{5}$
d) $\frac{2}{3}, \frac{3}{4}, \frac{-1}{2}, \frac{-5}{6}, \frac{1}{3}, \frac{-3}{4}$

## Station B

1. Calculate the square roots of each of these numbers.
(consider both positive and negative answers!!!)
a) 9
b) 4
c) 16
d) 81
2. Estimate these square roots, without using a calculator.
a) $\sqrt{12}$
b) $\sqrt{7}$
c) $\sqrt{75}$
3. Solve for $x$.

b)


## Station C

1. Complete the table.

| Fraction | Decimal | Percent |
| :---: | :---: | :---: |
|  | 0.21 |  |
|  |  | $8 \%$ |
| $\frac{12}{50}$ | 1.35 |  |
|  |  | $140 \%$ |
| $\frac{1}{20}$ |  |  |

2. A sweater is on sale for $25 \%$ off. If the regular price is $\$ 72.99$, determine the sale price.
3. Krishna got 14 out of 20 on their science test. What is their percentage grade?

## Station D

1. Simplify.
a) $-3+(-4)$
b) $2-(-3)$
c) $-5+(+1)$
d) $-2-(-1)$
e) $5+(-3)$
f) $7-(+9)$
2. Simplify.
a) $(-2)(-3)$
b) $(4)(-5)$
c) $(-3)(+1)$
d) $\frac{-12}{3}$
e) $\frac{-15}{-5}$
f) $\frac{20}{-4}$
3. Simplify.
a) $5-4 \times 2+3$
b) $-3 \times(-2)-(8 \times 2)$
c) $5^{2}-3 \times 2^{2}+2^{3}$

## Station E

1. Simplify.
a) $2 m+3 m$
b) $5 x y-7 x y$
c) $\quad-3 w-9 w$
2. Simplify.
a) $(3 x+2 y)+(4 x-5 y)$
b) $(2 a-4 b)+(a-2 b)$
3. Evaluate each expression for $x=3$ and $y=-2$.
a) $2 x-3 y$
b) $3 x y+2 y-x$
4. Evaluate each expression for $x=\frac{-1}{2}$ and $y=\frac{3}{4}$.
a) $2 x+3 y$
b) $x y-5 x$

## Station F

1. Use the following scatter plot showing ice cream sales to answer the questions below.

a) Is the relationship positive or negative? $\qquad$
b) Is the relationship strong or weak?
c) Is the relationship linear or non-linear?
d) Estimate the sales when the temperature was $22^{\circ} \mathrm{C}$ ? $\qquad$
e) Estimate the temperature that would result in sales of $\$ 450$.
2. Create a scatter plot for the data shown.

| $\#$ <br> books | Weight <br> (lbs) |
| :--- | :--- |
| 1 | 0.5 |
| 1 | 1.2 |
| 2 | 1.2 |
| 2 | 2.6 |
| 3 | 1.8 |
| 4 | 2.8 |
| 4 | 5.4 |
| 5 | 6.5 |
| 6 | 5.5 |
| 8 | 8 |



## Station G

1. Determine the mean, median, and mode for the data.

$$
5,7,8,8,8,9,9,10,10,11,11,11,11,12
$$

2. Use the Venn Diagram below to determine the probability that a person randomly selected from this group has:

a) only a dog
b) at least one cat or dog
c) both a cat and a dog
d) either a cat or a dog but not both

## Station H

1. Determine the measure of angle $x$. How do you know?
a)

b)

c)

2. Determine the value of each unknown angle.

b)

3. Determine the perimeter and area of the figure show.
( $\mathrm{A}=1 \mathrm{w}, \mathrm{A}=\pi \mathrm{r}^{2}, \mathrm{C}=2 \pi \mathrm{r}$ )

