**Success Criteria**

*I can \_\_\_\_\_\_\_\_\_\_\_\_ a real world situation represented in an equation by using \_\_\_\_\_\_\_\_\_\_\_\_ operations and properties of equality.*

Algebra OPFI Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**U2 LT3/4 Modeling Notes**

*LT 3: SWBAT model real world scenarios using one or two step equations.*

*LT 4: SWBAT solve real world scenarios using one or two step equations.*

Ex 1: The chess club is holding a car wash to raise funds for an upcoming tournament. If the club wants to raise $600, how many cars will they have to wash if they charge $3 for each car? Let *c* be the number of cars washed. Which of the following represents this scenario?

Which equation represents this situation?

A. $600=\frac{3}{C}$

B. 600 = 3c

C. 600 = 3 + c

D. $600=\frac{c}{3}$

Ex 2: You have saved $70 to buy a mountain bike that costs $250. You plan to save $10 each week. How many weeks will it take to save enough money to purchase the mountain bike?

Which equation represents this situation?

A. 10 = 70x + 250

B. 250 = 70x + 10

C. 250 = 10x + 70

D. 70 = 10x + 250

Which equation represents this situation?

A.

B.

C.

D.

Ex 3: Alex wanted to learn to surf. He bought a surf board for $117 and spent $45 per hour on lessons. He spent at Total of $720. How many hours of lessons did he take?

Which equation represents this situation?

A. 720 = 117 + 45x

B. 117 = 45 + 720x

C. 720 = 117x + 45

D. 45 = 117x + 720

Which equation represents this situation?

A.

B.

C.

D.

You Try….

A bowling league requires you to buy a bowling for $45 and pay $12 for each game. If you spent $129 total how many games did you play?

Which equation represents this situation?

A. 45 = 12x + 129

B. 45 = 129x + 12

C. 129 = 12x + 45

D. 129 = 45x + 12

Ex 4: A fish tank has 180 gallons on water in it and is draining at a rate of 12 gallons per minute. After draining for while it now has 45 gallons in it. How many minutes was it draining for?

Which equation represents this situation?

A. 12 = 180 – 45x

B. 45 = 180 + 12x

C. 180 = 45 – 12x

D. 45 = 180 – 12x

You Try….

Alesha was given a $720 gift card for his birthday. He bought some video games that cost $45 and now he $180 left on the card. How many video games did he buy?

Which equation represents this situation?

A. 180 = 720 – 45x

B. 720 = 45x – 180

C. 180 = 720x – 45

D. 180 = 45x + 720



Exit Ticket: You are visiting Baltimore, MD and a taxi company charges a flat fee of $3.00 for using the taxi and $0.75 per mile. If a taxi ride cost $15, how many miles did the taxi travel?

Which equation represents this situation?

A. 3 = 0.75x + 15

B. 15 = 0.75x + 3

C. 15 = 3x + 0.75

D. 0.75 = 3x + 15