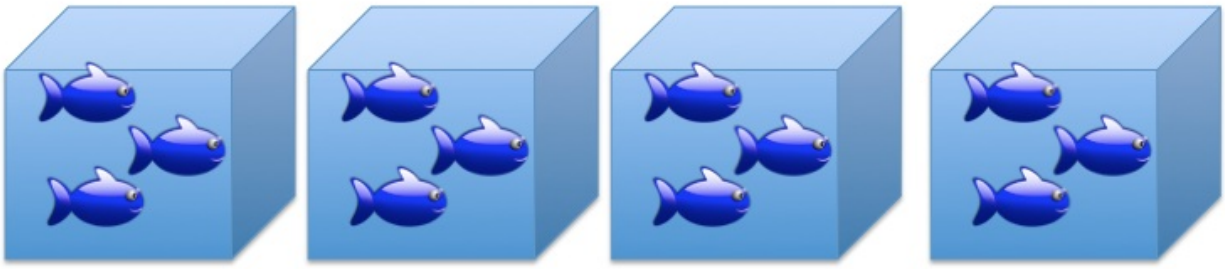
Fish Tanks

Task



Suppose there are 4 tanks and 3 fish in each tank. The total number of fish in this situation can be expressed as $4 \times 3 = 12$

a. Describe what is meant in this situation by $12 \div 3 = 4$

b. Describe what is meant in this situation by $12 \div 4 = 3$

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Markers in Boxes

Task

- Presley has 18 markers. Her teacher gives her three boxes and asks her to put an equal number of markers in each box.
- Anthony has 18 markers. His teacher wants him to put 3 markers in each box until he is out of markers.

a. Before you figure out what the students should do, answer these questions:

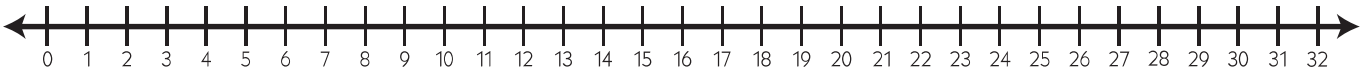
What is happening in these two situations? How are they similar? How are they different?

b. Figure out how many markers Presley should put in each box. Show your work. Then figure out how many boxes Anthony should fill with markers. Show your work.

NAME _____ **DATE** _____

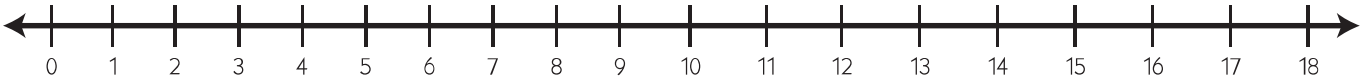
Frank the Frog & Bob the Beetle

1a Frank the frog goes 4 feet each time he jumps. How many times will he have to jump to make it 32 feet? Show all your work. Use the number line below to help.



b Complete the division equation to show your answer above: 32 ÷ 4 = _____

2a Bob the beetle can crawl 6 feet in a minute. How long will it take him to crawl 18 feet? Show all your work. Use the number line below to help.



b Write a division equation to show your answer. _____

CHALLENGE

c How long would it take Bob to crawl 27 feet? Show all of your work.

Find the Unknown Number

Building Fluency: understand division as an unknown factor problem

Materials: a recording sheet for each player, unknown number game cards

Number of Players: 2

Directions:

1. Spread out the missing number game cards.
2. Players take turns picking a card and telling the unknown number.
3. The player keeps all cards correctly answered & writes the equation as both a multiplication & division equation on their recording sheet.

   Example: 4 x $\boxed{7}$ = 28; 28 ÷ 4 = $\boxed{7}$
4. If the player answers incorrectly, the card is placed back in the pile.
5. Play until all cards are picked and the player with the most cards wins.

Variation/Extension: When a player misses a question, the other player may answer correctly and keep the card. This game could be played by an individual just picking and recording equations. A multiplication chart may be needed to solve any disagreements.

PLAYER 1

Multiplication	Division
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.

PLAYER 2

Multiplication	Division
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.

1 x ___ = 5	1 x ___ = 4	1 x __ = 3	1 x ___ = 2
2 x ____ = 10	2 x ____ = 8	2 x ____ = 6	2 x ____ = 4
3 x ___ = 15	3 x ___ = 12	3 x ___ = 9	3 x ___ = 6
4 x ___ = 20	4 x ___ = 16	4 x ___ = 12	4 x ___ = 8

5 x ___ = 25	5 x ___ = 20	5 x ___ = 15	5 x ___ = 10
1 x ____ = 9	1 x ____ = 8	1 x ____ = 7	1 x ____ = 6
2 x ___ = 18	2 x ___ = 16	2 x ___ = 14	2 x___ = 12
3 x ___= 27	3 x ___= 24	3 x ___ = 21	3 x ___ = 18

1 x ____ = 10	3 x ___= 30	6 x ___ = 18	6 x ___ = 12
2 x ____ = 20	4 x ___= 40	5 x ___= 50	7x ___ = 14
4 x ___= 36	4 x ___= 32	4 x ___ = 28	4 x ___ = 24
5 x ___= 45	5 x ___= 40	5 x ___ = 35	5 x ___ = 30

7 x ___ = 70	7 x ___ = 63	7 x ___ = 56	7 x ___ = 49
8 x ___ = 80	8 x ___ = 72	8 x ___ = 64	8 x ___ = 56
9 x ___ = 90	9 x ___ = 81	9 x ___ = 72	9 x ___ = 63
10 x ___ = 100	10 x ___ = 90	10x ___ = 80	10x ___ = 70

7 x ___ = 42	7 x ___ = 35	7 x ___ = 28	7 x ___ = 21
8 x ___ = 48	8 x ___ = 40	8 x ___ = 32	8 x ___ = 24
9 x ___ = 54	9 x ___ = 45	9 x ___ = 36	9 x ___ = 27
10 x ___ = 60	10x ___ = 50	10 x ___ = 40	10x ___ = 30

	6 x ___= 54	6 x ___= 48	6 x ___ = 42
	6 x ___ = 36	6 x ___ = 30	6 x ___ = 24
		10x ___ = 20	8x ___ = 16
		6 x ___= 60	9x ___ = 18

Finding the unknown in a division equation

Task

Tehya and Kenneth are trying to figure out which number could be placed in the box to make this equation true.

Tehya insists that 12 is the only number that will make this equation true.

Kenneth insists that 3 is the only number that will make this equation true.

$$2 = \square \div 6$$

Who is right? Why? Draw a picture to support your idea.