All late work due Today @ 3:40.

Corrected homework also due today.

1/29

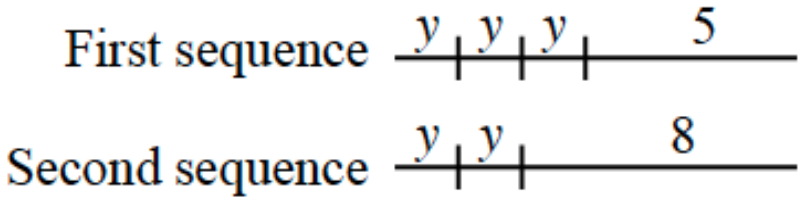
Variables: Letters representing unknown values.

x, y most common variables

Finding unknown values is one of the most important parts of algebra.

Croakie is a very talented frog. He does tricks for the audiences at the Calaveras County Fair contest every year. Some of his tricks are quickly making him famous.

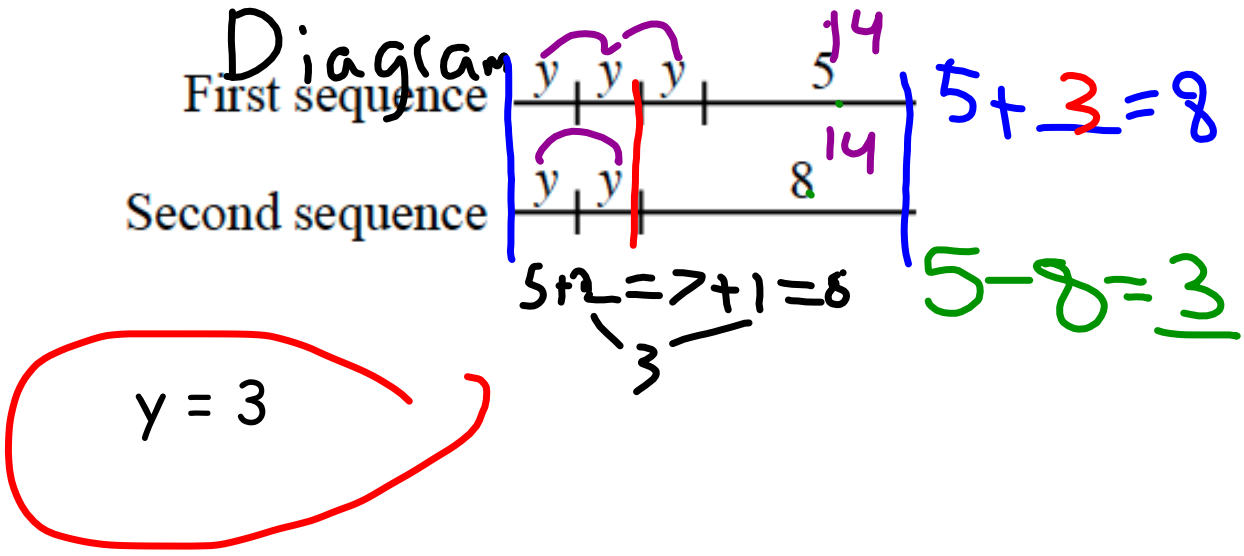
Now Croakie has a new special jump length. He moves between two fixed points, each time with a different sequence. His trainer, Thom, drew the **diagram** below to represent his first sequence, using the variable y to represent the length of Croakie's new special jump.



Work with your team to figure out how far Croakie travels in each special jump. Be prepared to explain your thinking to the class.

What is the distance between the start and end of his sequence of jumps?

Now Croakie has a new special jump length. He moves between two fixed points, each time with a different sequence. His trainer, Thom, drew the **diagram** below to represent his first sequence, using the variable y to represent the length of Croakie's new special jump.



Work with your team to figure out how far Croakie travels in each special jump. Be prepared to explain your thinking to the class.

What is the distance between the start and end of his sequence of jumps?

Croakie has a new set of moves. The sequence involve three special high hops. The **expression**

$x + x + x + 5$

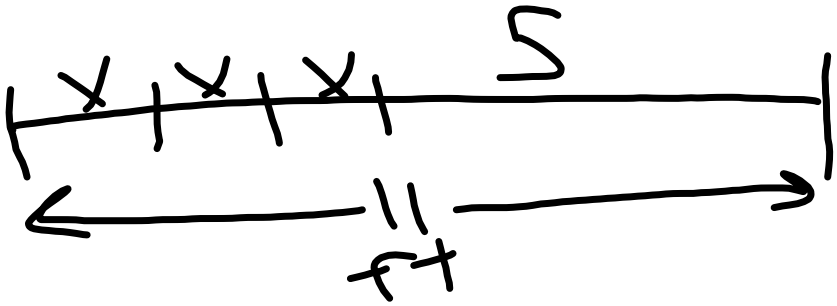
represents the whole sequence, with x representing the distance he moves with each high hop.

In your own words, describe what you know about Croakie's new sequence.

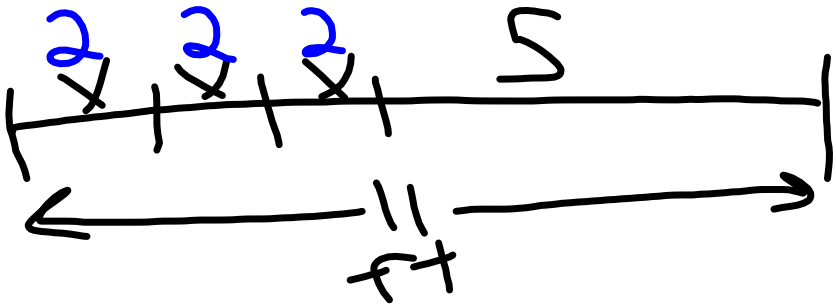
Three high hop jumps, all the same length, followed by a 5 ft jump

$x + x + x + 5$

If Croakie's new sequence is a total of 11 feet, draw a **diagram** to represent Croakie's new sequence.



How far does Croakie jump with each high hop?
How can you tell? 2 feet



$45\frac{7}{9} + 15\frac{5}{6}$

9, 18, 27

6, 12, 18

$45\frac{7}{9} \quad \frac{2}{2} \quad \frac{14}{18}$

$+\ 15\frac{5}{6} \quad \frac{3}{3} \quad \frac{15}{18}$

$60\frac{11}{18}$

$+\ 6\frac{11}{18}$

$\frac{15}{18} + \frac{14}{18} = \frac{29}{18} =$

$1\frac{11}{18}$