

Supporting Students as They Work with Bar Models

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The New York State math modules are found at: <https://www.engageny.org/common-core-curriculum>



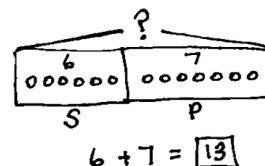
Good to Know: Common Core Concepts for Parents wskg.org/goodtoknow



1. Help parents understand the value of tape diagrams.

2. Draw circles for numbers.

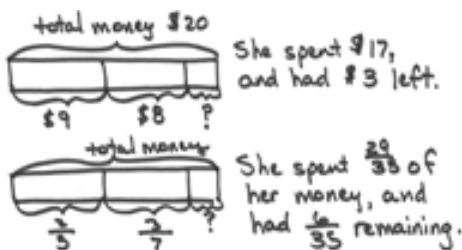
Lee saw 6 yellow squash and 7 pumpkins growing in his garden. How many vegetables did he see growing in his garden? (G1.M4.L19)



3. Use smaller or simpler (friendlier) numbers.

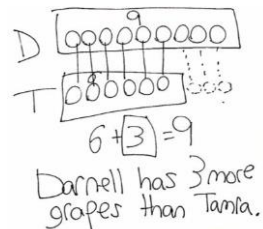
Meredith went to the movies. She spent $\frac{2}{5}$ of her money on a ticket and $\frac{3}{7}$ of her money on popcorn. How much of her money did she spend? How much of her money is left? (G5.M3.L11)

Meredith went to the movies. She spent \$9 of her money on a movie and \$8 of her money on popcorn. How much money did she spend? If she started with \$20, how much is left?

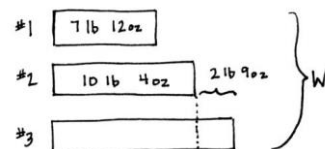


4. Use connectors and/or dividers.

Darnell and Tamra are comparing their grapes. Darnell's vine has 9 grapes. Tamra's vine has 6 grapes. How many more grapes does Darnell have than Tamra? (G1.M5.L5)

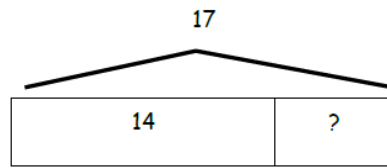


One pumpkin weighs 7 pounds 12 ounces. A second pumpkin weighs 10 pounds 4 ounces. A third pumpkin weighs 2 pounds 9 ounces more than the second pumpkin. What is the total weight of all three pumpkins? (G4.M7.L10)



5. Match stories and tape diagrams.

- Circle the 2 story problems that match the tape diagram. G1.M4.L22 Exit Ticket



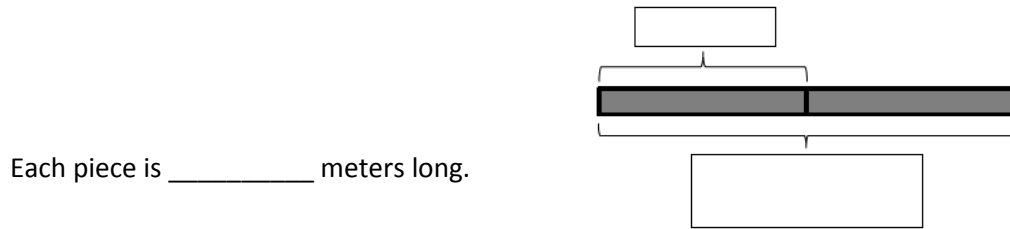
- A. There are 14 ants on the picnic blanket. Then some more ants came over. Now there are 17 ants on the picnic blanket. How many ants came over?
- B. Fourteen children are on the playground from one class. Then 17 children from another class came to the playground. How many children are on the playground now?
- C. Seventeen grapes were on the plate. Willie ate 14 grapes. How many grapes are on the plate now?

- Problem Matches
 - Make your own
 - Teachers Pay Teachers
 - Search using bar models, tape diagrams, and strip diagrams.

1	Addition & Subtraction Strip Diagrams (Tape Diagrams) Scoot Activity/Task Cards by Teaching with Heart in Texas
2	Addition Bar Model Cards by Number Sense Guy
3	Building Bar Models Addition and Subtraction Task Cards (3 Levels) by Amber Thomas
4	Modeling Multiplication of Fractions Activities by MissMathDork
5	Multiplication and Division Problems Using Strip Diagrams: New 4th Grade TEKS by Dana Sims
6	Multiplication & Division Strip Diagrams Scoot Activity/Task Cards by Teaching with Heart in Texas
7	Representing Word Problems with Strip Diagrams and Equations: TEKS 3.5B by Jolene Ray
8	Tape Diagram Multiplication WORD PROBLEM Task Cards by Kim Shelley

6. Add labels to tape diagrams. Grade 3, Module 1

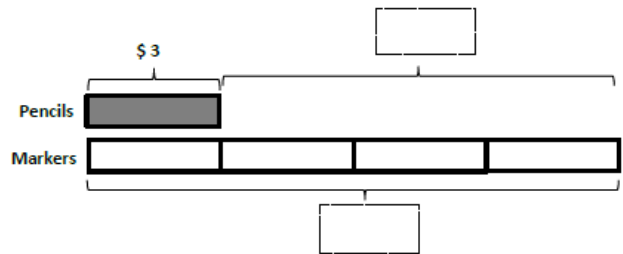
Lesson 12: Laina buys 14 meters of ribbon. She cuts her ribbon into 2 equal pieces. How many meters long is each piece? Label the tape diagram to represent the problem, including the unknown.



Lesson 20: Jerry buys a pack of pencils that costs \$3. David buys 4 sets of markers. Each set of markers also costs \$3.

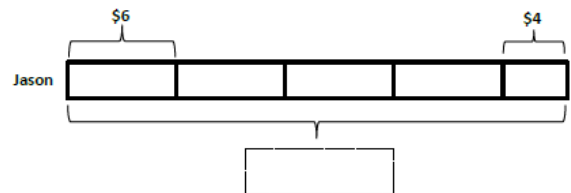
a. What is the total cost of the markers?

b. How much more does David spend on 4 sets of markers than Jerry spends on a pack of pencils?



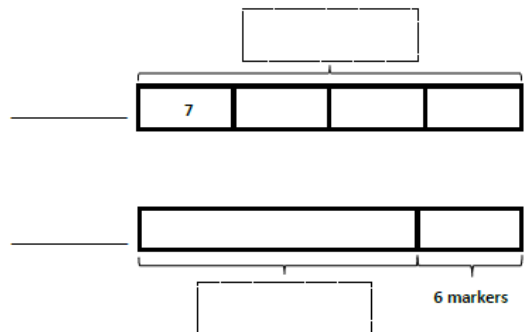
Lesson 21: Jason earns \$6 per week for doing all his chores. On the fifth week, he forgets to take out the trash, so he only earns \$4. Write and solve an equation to show how much Jason earns in 5 weeks.

Jason earns _____.



Lesson 21: Miss Lianto orders 4 packs of 7 markers. After passing out 1 marker to each student in her class, she has 6 left. Label the tape diagram to find how many students are in Miss Lianto's class.

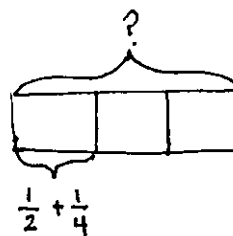
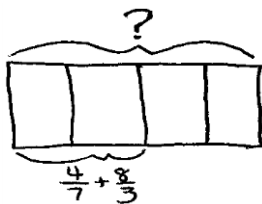
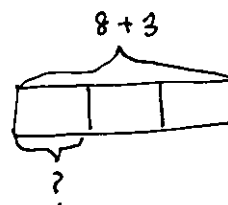
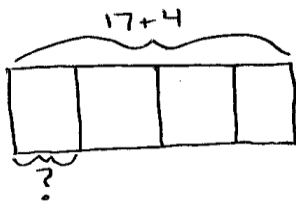
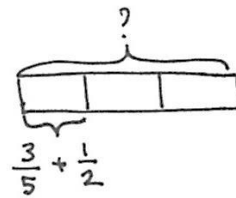
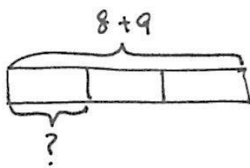
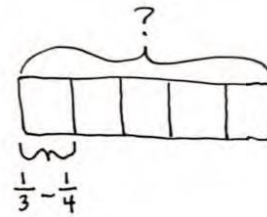
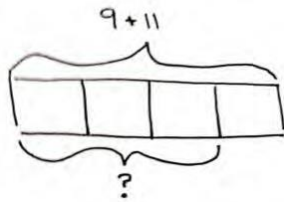
There are _____ students in Miss Lianto's class.



7. Write expressions for tape diagrams.

G5M4L10&11

Write expressions to match the diagrams. Then evaluate.



8. Write stories for tape diagrams. (G4M1L19, G4M7L5, G5M4L11, G5M4L28)

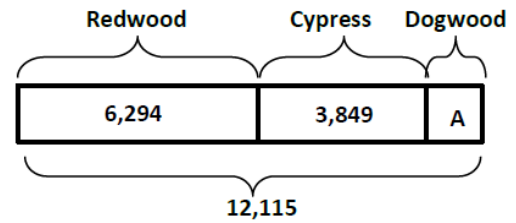
1. At the local botanical gardens, there are _____

Redwoods and _____ Cypress trees.

There are a total of _____ Redwood,
Cypress, and Dogwood trees.

How many _____

_____?



2. There are 65,302 _____

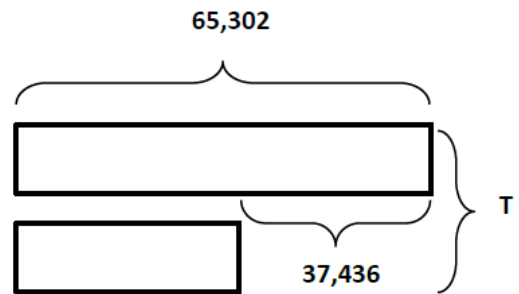
_____.

There are 37,436 fewer _____

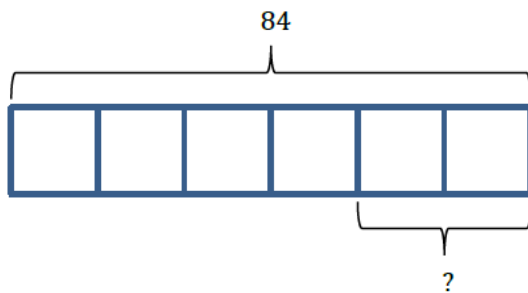
_____.

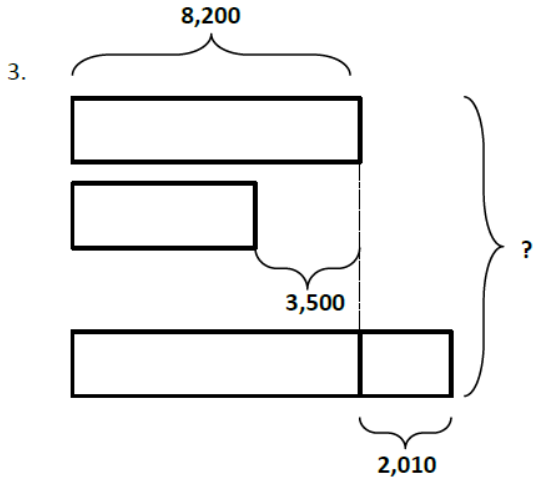
How many _____

_____?

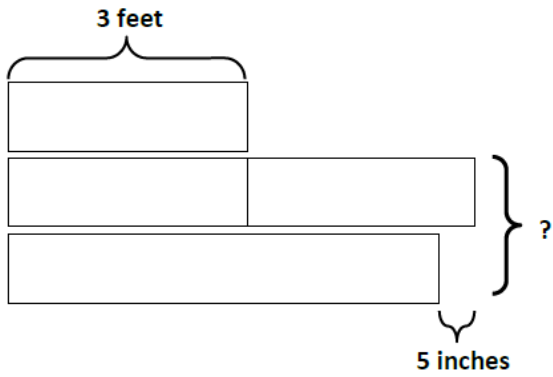


5. Create a story problem about a fish tank for the tape diagram below. Your story must include a fraction.



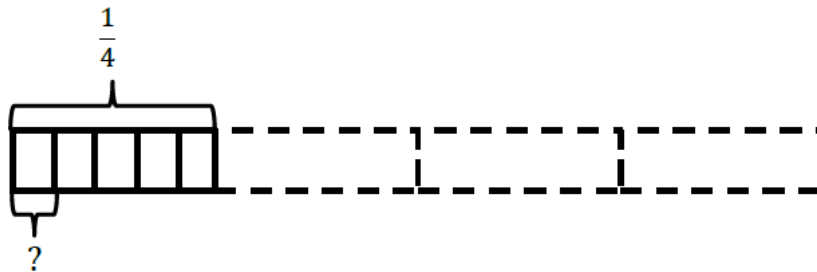


1. a. Label the rest of the tape diagram below. Solve for the unknown.



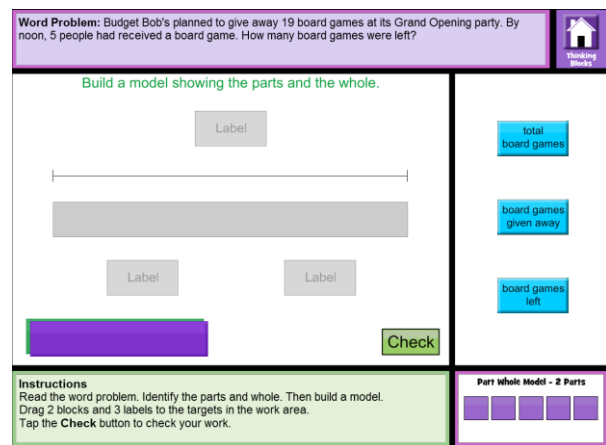
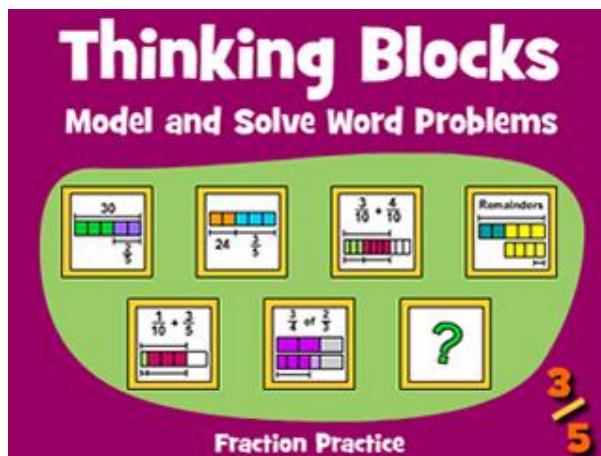
- b. Write a problem of your own that could be solved using the diagram above.

2. Create and solve a story problem about $\frac{1}{4}$ pound of almonds that is modeled by the tape diagram below.



9. Create tape diagrams with immediate feedback.

Thinking Blocks: <http://www.mathplayground.com/thinkingblocks.html>



10. Use color when appropriate.

94 children are in a reading club. One-third of the boys and three-sevenths of the girls prefer fiction. If 36 students prefer fiction, how many girls prefer fiction? (NTI Training Example)

