Visualizing Ratios with Tape Diagrams

Tape diagrams are one way to visualize a ratio relationship. Set up parallel bars using the correct number of segments to reflect the ratio. Since each segment represents the same quantity, the diagram can be used to solve problems.

example: For every 2 movies Giovanni owns, he owns 5 books. If Giovanni owns 12 more books than movies, how many movies does he own?

Step 1. Draw segmented bars to reflect the ratio: 2 movies to 5 books.

movies			
books			

Step 2. Identify the part of the diagram showing the known quantity: 12 more books than movies.

movies		12		
books		<u> </u>)



Preview

Please log in to download the printable version of this worksheet.

DIAN TAPE GIAGIANIS TO ANSWEL INC QUESTIONS, SHOW YOUR WORK.

1. A grocery store stocks boxes of pasta in a ratio of 1 box of wheat to 4 boxes of regular. If the store stocks 350 total boxes of pasta, how many are regular?

answer:

2. Nevaeh's grade took a survey. For every 3 students who preferred pop music, 2 preferred rock. If 22 students preferred rock, how many preferred pop?

answer: _____

Name:

Visualizing Ratios with Tape Diagrams

3.	The quilt Maisy is making uses 7 pieces of red fabric for every 3 pieces of black fabric.
	If she uses 36 more pieces of red fabric than black fabric, how many pieces of black
	fabric will she use?

answer:	•	
answer:	·	

4. Esteban sells jars of specialty slime in a ratio of 2 glitter slimes for every 5 plain slimes. If he sold 30 jars of glitter slime, how many jars of plain slime did he sell?



answer:			

6. Mr. Cisneros's bakery sells 3 donuts for every 5 cookies. If he sold 144 donuts and cookies combined, how many were cookies?

answer: _____

ANSWER KEY

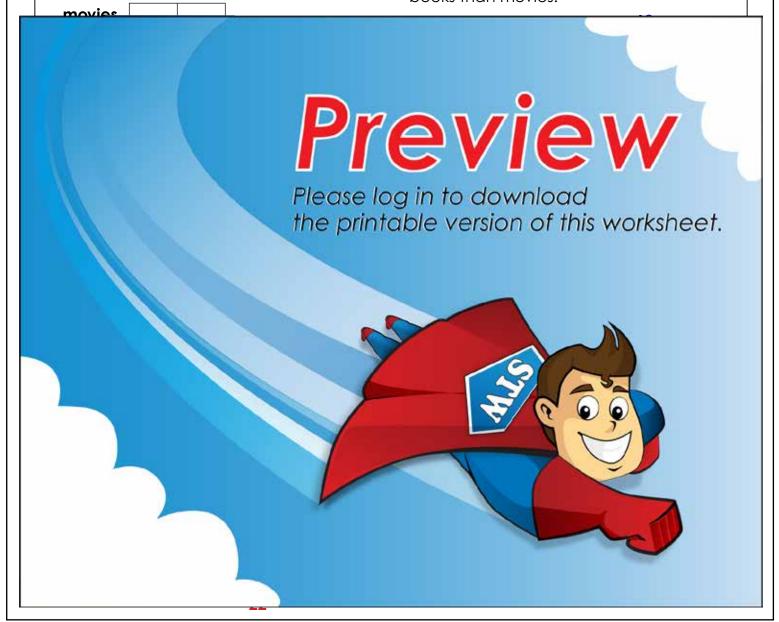
Visualizing Ratios with Tape Diagrams

Tape diagrams are one way to visualize a ratio relationship. Set up parallel bars using the correct number of segments to reflect the ratio. Since each segment represents the same quantity, the diagram can be used to solve problems.

example: For every 2 movies Giovanni owns, he owns 5 books. If Giovanni owns 12 more books than movies, how many movies does he own?

Step 1. Draw segmented bars to reflect the ratio: 2 movies to 5 books.

Step 2. Identify the part of the diagram showing the known quantity: 12 more books than movies.



ANSWER KEY

Visualizing Ratios with Tape Diagrams

3. The quilt Maisy is making uses 7 pieces of red fabric for every 3 pieces of black fabric. If she uses 36 more pieces of red fabric than black fabric, how many pieces of black fabric will she use?

