Ratio & Proportions

Grades 5-8

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The Math Projects Journal
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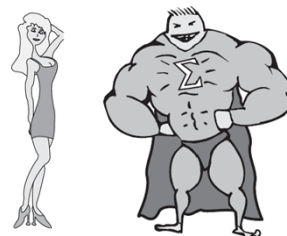
@MathProjects

1

How Big is Barbie

2

How Big is Barbie

FEMALE	Doll	Height	Head	Chest	Waist	Inseam	Foot
Ratio							
Height		65"					
Head			21"				
Chest				36"			
Waist					24"		
Inseam						30"	
Foot							9"

3

How Big is Barbie

4

Counting Fish

5

Counting Fish

(tagged original)
(total lake)
$$\frac{100}{x} = \frac{4}{200}$$
(tagged recaptured)
(total recaptured)

$(10)\dfrac{3}{5} = \dfrac{6}{10}(10)$

$(5)\dfrac{3(10)}{5} = 6(5)$

$3(10) = 6(5)$

$\dfrac{100}{x} = \dfrac{4}{200}$

$100(200) = 4x$

$x = \dfrac{100(200)}{4} = 5000$

$5000 \; fish$

Means − Extremes Property: if $\dfrac{a}{b} = \dfrac{c}{d}$, then ad = bc.

6

1

Counting Fish Simulation

(tagged original) $\dfrac{100}{x}$ = $\dfrac{4}{200}$ (tagged recaptured)
(total lake)   (total recaptured)

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Summer Conferences

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7

M & M Count –n-Crunch

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M & M Count-n-Crunch

2. Open your bag and count the actual number of each color and calculate the percentage.

ESTIMATIONS

Color	Number	%
Red		
Brown		
Yellow		
Green		
Orange		
Blue		
TOTALS		

ACTUAL DATA

Color	Number	%
Red		
Brown		
Yellow		
Green		
Orange		
Blue		
TOTALS		

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9

M & M Count-n-Crunch

a. Record the m&m data from all the groups in the class:

Group	Red	Brown	Yellow	Green	Orange	Blue
#1						
#2						
#3						
#4						
#5						
#6						
#7						
#8						
#9						
TOTALS						

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10

M & M Count-n-Crunch

Color	a) Est. from Group's Bag		b) Est. from Class's Stats		Actual Bag
	Small Bag	Large Bag	Class Stats	Large Bag	Large Bag
Red					
Brown					
Yellow					
Green					
Orange					
Blues					
TOTALS					

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11

Ratio & Proportions

2-Week Rule

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12

**Use Dolls, Beans & Candies
To Teach Ratio & Proportions**

…**with the faith that they can learn it,
and that we can teach it to them,**

…**so you can change this world,
one math lesson at a time.** MPJ

13