







Unit 3 Assessment Self-Check

1. Jason bought a box of chocolates with 9 pieces in it and 3 dozen roses. What is the ratio of chocolates to roses?
A. 1:4 **B.** 3:9 **C.** 1:4 **D.** 9:3

2. Denzel is cooking rice. The recipe he is using calls for 3 cups of water per cup of uncooked rice, and the recipe makes 4 cups of cooked rice. What is the ratio of water to cooked rice? There may be more than one correct ratio.
A. $\frac{3}{4} : 1$ **B.** 7:1 **C.** 3:4 **D.** 3 **E.** 1.3:1 **F.** 8:6

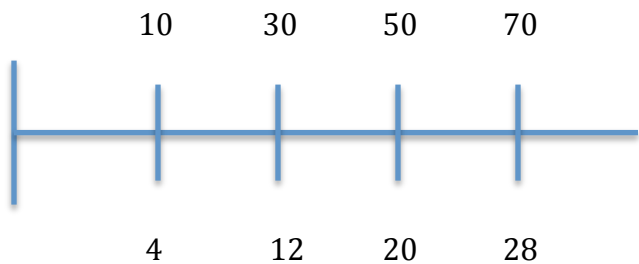
3. Ashley and Emma both collect stamps. The ratio of Ashley's stamps to Emma's stamps is 5:4.
 - a) Which of these tape diagrams represents the ratio of Ashley's stamps to Emma's stamps?

A. Ashley	
Emma	
B. Ashley	
Emma	
C. Ashley	
Emma	

- b) What is the ratio of Emma's stamps to the total number of stamps that Ashley and Emma have?

4. Mia received a box of chocolates for her birthday. This double number line shows Mia's chocolates as ratio of chocolates with nuts to chocolates without nuts.

With nuts



Without nuts

- a. What percent of all chocolates in Mia's box do not contain nuts?
- b. Mia counted 24 chocolates without nuts. How many chocolates with nuts were in the box?
- c. As Mia eats the chocolates, she keeps the ratio of chocolates with nuts to chocolates without nuts in proportion to the starting ratio. How many chocolates (with and without nuts) has Mia eaten if she has eaten 15 chocolates with nuts?

5. Carlos and Emma are comparing prices of Grape Jelly. Here are the brands and prices they found:

- Brand A: \$3.92 for 35 ounces
- Brand B: \$2.84 for 24 ounces
- Brand C: \$ 3.59 for 50 ounces
- Brand D: \$1.92 for 16 ounces
- Brand E: \$2.52 for 20 ounces

Find the unit price (unit rate) for each brand. What brand is the best buy if you use price as the criterion?

6. A glide ratio $a:b$ is defined by the horizontal distance **a** per vertical height **b**.

An albatross descends 720 feet over a horizontal distance of 3 miles.
(5280 feet = 1 mile)



A space shuttle has a glide ratio of 300%



a. Complete this glide ratio table for the albatross.

Albatross							
Distance (ft)		660				3,300	
Height (ft)	5		20	100	300		1,000

b. Complete this glide ratio table for the space shuttle.

Space Shuttle							
Distance (ft)		15				6,000	
Height (ft)	1		50	100	300		1,000

7. Martin found a recipe for zucchini boats online.

- 4 large zucchinis
- 3 cups of corn kernels
- $\frac{1}{4}$ cup chopped onions
- 2 cups chopped tomatoes
- $\frac{1}{2}$ cup grated Parmesan cheese



The recipe makes 8 zucchini boats. But Martin wants to make only 2 zucchini boats:

- a. What ratio does Martin need to apply to the recipe in order to make 2 zucchini boats instead of 8?

- b. What amount of Parmesan cheese will Martin use in order to make 2 zucchini boats?