Solving Ratio, Proportion, and Percent Story Problems

1. A 12-ounce bottle of shampoo lasts Enrique 16 weeks. How long would you expect an 18-ounce bottle of the same brand to last him?

☐ a) 24 Weeks
☐ b) 24-ounce bottle
☐ c) 10.6 Weeks
☐ d) 10.6-ounce bottle

2. The waiting time to ride a roller coaster is 20 minutes when 150 people are in line. How long is the waiting time when 240 people are in line?

☐ a) 32 People
☐ b) 32 Min.
☐ c) 12.5 Min.
☐ d) 12.5 People

3. Just For Feet has 3,115 boxes of shoes on 38 equal size shelves. If they plan on adding 9 more shelves of the same size, how many more boxes of shoes will they be able to hold?

☐ a) 737 shoes
☐ b) 737 shelves
☐ c) 738 shoes
☐ d) 738 shelves

4. A cake recipe calls for 1.5 cups of milk and 3 cups of flour. Seth made a mistake and used 5 cups of flour. How many cups of milk should he use to keep the proportions correct?

☐ a) 2.5 cups milk
☐ b) 1.75 cups milk
☐ c) 2 cups flour
☐ d) 2.25 cups milk

LIVEWORKSHEETS

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6. A baseball pitcher won 80% of the games he pitched. If he pitched 35 ballgames, how many games did he win?

☐ a) 28 games ☐ b) 50 games

☐ c) 35 games ☐ d) 30 games

7. The Royals softball team played 75 games and won 55 ofthem. What percent of the games did they lose? (round tothe nearest tenth)

☐ a) 70% ☐ b) 60%

☐ c) 73.3% ☐ d) 75.3%

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8. Manuel found a wrecked Trans-Am that he could fix. Hebought the car for 65% of the original price of $7200.What did he pay for the car? (Round to nearest dollar)

- ☐ a) $4680
- ☐ b) $4000
- ☐ c) $4500
- ☐ d) $1

9. Jeff ran 6 miles in 4 hours. At this rate, how many miles will he run in 6 hours?

- ☐ a) 9 miles
- ☐ b) 4 miles
- ☐ c) 6 miles
- ☐ d) 36 miles

LIVEWORKSHEETS

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10. In an animal shelter, the ratio of dogs to cats is 5 to 3. There are 25 dogs. Write and solve a proportion to find the number c of cats.

☐ a) c=15 ☐ b) c=18

☐ c) c=21 ☐ d) c=16

11. Josh bought a pizza with eight slices of pizza for $12. What is the cost of a slice of pizza?

☐ a) $12 ☐ b) $1.50

☐ c) $3 ☐ d) $1

12. Which TWO serves earned the highest amount in tips?

☐ a) Emma earned 15% tip on a bill for $33.20. ☐ b) Ellie earned 22% tip on a bill for $28.42.

☐ c) Mick earned 20% tip on a bill for $18.53. ☐ d) Ben earned 18% tip on a bill for $24.50.

☐ e) Sally earned 10% tip on a bill for $36.70.

LIVEWORKSHEETS

13. A pair of shoes is on sale at 30% off the original price. If the original price is $50, what is the sale price?

- ☐ a) $15
- ☐ b) $35
- ☐ c) $20
- ☐ d) $65

14. Dr. Hall files 320 insurance claims every month. If 5% of those claims are rejected, how many of the claims are accepted?

- ☐ a) 304
- ☐ b) 16
- ☐ c) 300
- ☐ d) 20

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15. A bag of marbles comes with 3 blue marbles, 2 red marbles, and 5 yellow marbles. What is the ratio of red to yellow?

☐ a) 2 to 5
☐ b) 5 to 3
☐ c) 3 to 5
☐ d) 5 to 2

16. Determine if the ratios are proportional.
4/5 and 15/20

☐ a) Yes
☐ b) No

17. A parking lot has 117 spaces total. If 36 of the spaces have cars in them, what is the ratio of empty spaces to filled spaces?

☐ a) 117:36
☐ b) 36:117
☐ c) 36:81
☐ d) 81:36

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18. Shirley spelled 12 of her 15 spelling words correctly on the test. What percent grade did Shirley get on the test?

☐ a) 40% ☐ b) 50%

☐ c) 80% ☐ d) 60%

19. Sarah earns $20 a day working after school. She spent 30% of her daily earnings on Monday. How much money did she spend on Monday?

☐ a) $1.40 ☐ b) $6

☐ c) $0.60 ☐ d) $14

20. 15 out of 25 boys chose to go swimming at camp. What percent is that?

☐ a) 15% ☐ b) 20%

☐ c) 45% ☐ d) 60%

LIVEWORKSHEETS