

A. Tell if each situation represents a direct proportion, an inverse proportion, or a partitive proportion. Write *D* if it is direct, *I* if it is inverse, or *P* if it is partitive. Write your answer on the blank. Set up the needed proportion to solve each situation.

- _____ 1. The ratio of two numbers is $3 : 5$. Their sum is 32. What is the larger number?
- _____ 2. Kyla used 8 eggs to make 20 cupcakes. How many cupcakes can she make with 18 eggs?
- _____ 3. Kimmy earns ₱5 000 in 10 days. How much will she earn in 35 days?
- _____ 4. Annie, Sam, and Kristine shared 80 shells in the ratio of $2 : 3 : 5$. How many shells did Sam receive?
- _____ 5. Rita traveled 25 kilometers in 10 hours. If the speed remains constant, how long will she travel for 45 kilometers?
- _____ 6. If 20 persons can consume a certain amount of food in 6 days, how long will 30 persons consume the same amount of food?
- _____ 7. In an evacuation center, the relief goods were enough for 100 evacuees in 15 days. If 20 evacuees returned to their houses, how long will the relief goods last for the remaining evacuees?
- _____ 8. One of the sponsors in an event gave a cash prize of ₱100 000 that will be divided by four winners. If the winners will receive a prize in the ratio of $1 : 2 : 2 : 3$, how much will the champion receive? (Hint: The champion should get the largest share.)
- _____ 9. Axle can read 4 novels in 60 days. How many novels can he read in 150 days at the same rate? (Let us assume that Axle reads at the same speed and reads novels of the same length.)
- _____ 10. Sixteen machines are needed to finish an output in 24 days. How many machines will be needed to finish the same output in 18 days?

_____ 11. A dozen eggs are sold for ₱72. How much will 30 eggs cost?

_____ 12. Alexa wants to cut a rope that measures 16 meters. She decided to cut it into three pieces in the ratio of 2 : 3 : 3. What is the length of the shortest piece?

_____ 13. Angel has enough poultry feed to feed her 20 chickens in 8 days. If she will be able to sell 4 chickens, how long will the feed last for the remaining chickens?

_____ 14. After eating in a restaurant, Maica and Melissa received their bill amounting to ₱1 800. If they decided to pay the bill in the ratio of 4 : 5, how much did Melissa pay?

_____ 15. Amy can cover a certain distance by car at a speed of 60 kilometers per hour (60 kph) for 8 hours. If she increases her speed to 70 kilometers per hour (70 kph), how long will she be able to cover the same distance?