

## **RATE PROBLEMS**

**Try using Different strategies of Double number line, tables or tape diagrams to solve the given problems**

A recipe for cinnamon rolls uses 2 tablespoons of sugar per teaspoon of cinnamon for the filling. Complete the double number line diagram to show the amount of cinnamon and sugar in 3, 4, 5 batches.



One batch of meatloaf contains 2 pounds of beef and  $\frac{1}{2}$  cup of bread crumbs. Complete the double number line diagram to show the amounts of beef and bread crumbs needed for 1, 2, 3, 4 batches of meatloaf.



A recipe for tropical fruit punch says "Combine four cups of pineapple juice with 5 cups of orange juice "

If 12 cups of pineapple juice are used with 20 cups of orange juice, will the recipe taste the same? Explain by completing the number line



4 movie tickets costs \$48. At this rate , what is the cost of :

5 movie tickets : \_\_\_\_\_

11 movie tickets : \_\_\_\_\_

Han ran 10 metres in 2.7 seconds. Priya ran 10 metres in 2.4 seconds.

Who can faster \_\_\_\_\_

At this rate , how long would it take each person to run 50 metres ?

Explain your answers.

\_\_\_\_\_

Tulip bulbs are on sale at store A for \$11.00 , and the regular price at store B is 6 for \$13. Is each store pricing tulip bulbs at the same rate ?

\_\_\_\_\_

While playing . Jada's heart rate goes up to 160 beats per minute. While jogging , her heart beat 25 times in 10 seconds . Assuming her heart beats at constant rate while jogging , which of these activities resulted in higher heart rate ?

A professional climber scaled the outside of the building , making it all the way to 828 meters in 6 hours.

How far did they climb in first 2 hours ? \_\_\_\_\_

How far did they climb in final 15 minutes? \_\_\_\_\_

Priya's family exchanged 250 dollars for 4250 pesos. Priya bought a sweater for 510 pesos. How many dollars did the sweater cost ?

pesos	dollars
4,250	250
25	
1	
3	
510	

An ant can travel at a constant speed 980 inches every 5minutes. At this rate , how many far can the ant travel in 7 minutes ?

There are 33.8 fluid ounces in a liter. There are 128 fluid ounces in a gallon. About how many litres are in a gallon ?

A pink paint mixture uses 4 cups of white paint for every 3 cups of red paint. The table shows different quantities of red and white paint for the same shade of pink. Complete the table

white paint (cups)	red paint (cups)
4	3
1	1
5	4

A car travels 55 miles per hour for 2 hours. Complete the table

time (hours)	distance (miles)	miles per hour
1	55	55
$\frac{1}{2}$		
$1\frac{1}{2}$	110	