

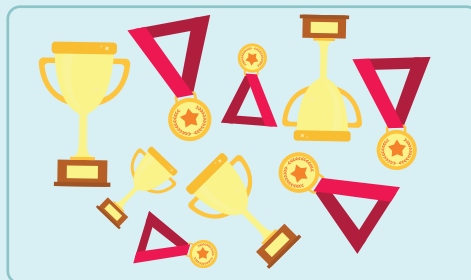
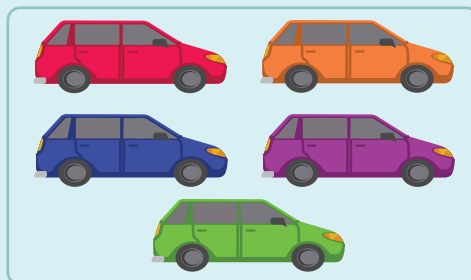
**Learning Outcome:**Practice class for Ratio before moving to Proportions.
(Critical Thinking).

7.RP.A.1

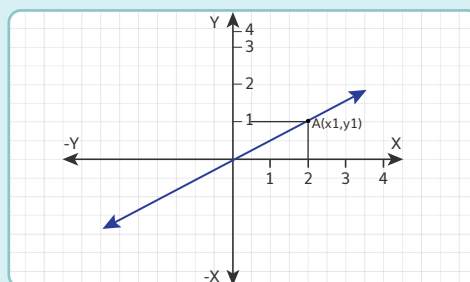
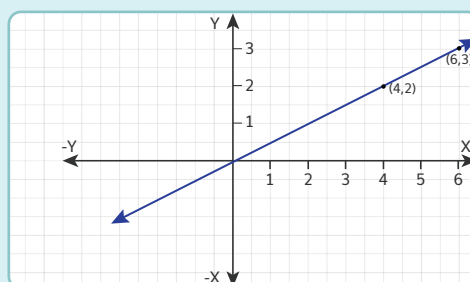
1 Find the ratio of:

Trophies to Medals

Medals to Prizes won

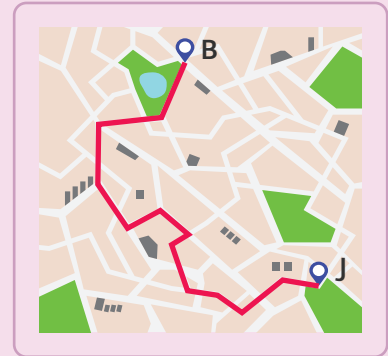
**2** 20 associates of Bad B are trying to escape in 5 cars in equal numbers. How many associates are there in each car?**3** The distance travelled vs time taken by Bad B and his associates is given below. Complete the table.

Distance (kms)	2		6
Time(min)	20	30	

4 Calculate $\frac{x_1}{y_1}$ from the graph.**5** The equation of the line is $y =$ 



- 1 The distance between Bad B and Agent J on the map is 15 centimeters. The scale on the map is 5 centimeters to 15 kilometers. What is the actual distance, in kilometers, between them? Bad B and Agent J



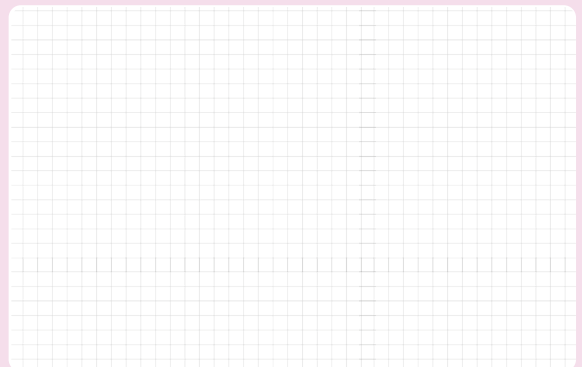
- 2 If Flyro consumes 60% of the battery to fly 220 miles, how much battery is left after travelling 330 miles?

- 3 J and one of his friends are riding bikes towards each other from opposite ends of a 24 mile biking route. J rides $2\frac{1}{6}$ miles every $\frac{1}{4}$ hour and his friend rides $7\frac{1}{3}$ miles per hour. After how many hours do they meet?



- 4 Flyro observed that lightning strikes earth 1000 times in 10 seconds. How long does it take to strike 7250 times?

- 5 While walking to school, Agent J observed that he covered 4 miles in every 2 minutes. While returning, he covered 5 miles in every 3 minutes. Plot a graph for both the cases in the space given and observe when he was faster.



**Learning Outcome:**

Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.

7.RP.A.1

Agent J's success in being able to nab the culprits became the talk of the town. Freelance Inc., an organisation which hires **Special Agents** to provide state-of-the-art services to different companies, reached out to Agent J to help them audit their finances. Their Chief Finance Officer, Mark, believes that a couple of their Special Agents might have committed a fraud by declaring incorrect expenses. Freelance Inc. compiles a monthly report of expenses incurred by each agent, to close the projects. **The projects are designed in such a way that the expenses incurred must be in a linear relationship with the number of projects closed every month.** Only Mark knows this (and now you), and believes that this could be a clue to identify if his Agents have committed any fraud.



Mark wants Agent J to analyze the financial statements of Freelance Inc. for 4 of their Special Agents to find out if any agent has committed a fraud. If a fraud is detected, Mark also wants to know the final amount that has been fraudulently charged.

Help Agent J finish his project. (Who are rogue agents and how much did they scam?)

Agent	Bruce Mayne		Barry Allin		Billy Bowler		Oliver King	
Month	Overall Expenditure (in million US dollars)	Projects Closed	Overall Expenditure (in million US dollars)	Projects Closed	Overall Expenditure (in million US dollars)	Projects Closed	Overall Expenditure (in million US dollars)	Projects Closed
Jan	22.4	7	5.4	3	9.6	3	46.2	11
Feb	9.6	3	12.6	7	35.2	11	9	2
Mar	19.2	6	10.2	4	19.2	6	36	8
Apr	28.8	9	18	10	22.4	7	31.5	7
May	6.4	2	9	5	12.8	4	16.5	3

Psst..! Graphs are often handy to “visualize” relationships.

