

Resources needed:

- Chalkboard or some manner for recording and displaying student responses
- Copies of exhibit cards or method for displaying them to the class

Setting the Context

Facilitator says: “Today, we are going to study and compare different fine systems that states use to calculate the cost of speeding tickets for drivers who go over the speed limits. Each state determines its own rules for calculating the cost of speeding tickets.”

Modeling a Process

Facilitator distributes Exhibit Card 1.

Facilitator says: “On this card, you have the speeding fine system for one county in Massachusetts. Take a minute to look at the system on Exhibit Card 1.”

Exhibit Card 1

Massachusetts Speeding Fines	
Excess Speed	Fine
1-10 mph	\$100 flat charge
11 mph or more	\$100 flat charge plus \$10 for each additional mph above the first 10 mph

Facilitator asks: "Let's discuss some of the terms that appear on the exhibit card. What does MPH stand for?" [Wait for responses]

Facilitator says: "MPH stands for miles per hour."

Facilitator asks: "What does excess speed mean?" [Wait for responses]

Facilitator says: "It is the number of miles per hour over the speed limit."

Facilitator says: "For example: Driving 46 mph in a 30 mph zone = 16 mph over the speed limit. So the excess speed is 16 mph."

Facilitator asks: "What is a fine?" [Wait for responses]

Facilitator says: "A fine is a penalty that a person must pay to the state for breaking a law."

Facilitator asks: "What is a flat charge?" [Wait for responses.]

Facilitator says: "A flat charge is a single fixed amount or cost that a person pays for speeding, regardless of the speed he or she is driving over the speed limit. For example, the fine for a speeding ticket for an excess speed of 2 mph is the same as the fine for an excess speed of 7 mph."

Facilitator says: "The fine in Massachusetts is calculated by determining how many miles per hour in excess of the speed limit a driver was traveling and then looking up the fine associated with that range of excess MPH."

Facilitator asks: "The fine in Massachusetts is calculated by adding the flat charge of \$100 for the first 10 miles per hour over the speed limit and \$10 for each mile per hour above the initial 10."

Facilitator says: "What would be the fine for a driver who is going 14 miles per hour over the speed limit in Massachusetts?" [Wait for responses; then on projector or chalkboard display

"\$100 (for the first 10 mph over the speed limit)
+ 4 \$10 (for 4 additional mph over the speed limit)
= \$140"]

Facilitator asks: "The fine would be \$140."

Facilitator says: "What would be the fine for a driver who is going 9 miles per hour over the speed limit?" [Wait for responses.]

Facilitator says: "It would be \$100."

Facilitator says: "Now we will take a look at the systems that Utah, Florida, and New York use."

Facilitator distributes Exhibit Cards 2, 3, and 4.

Exhibit Card 2

Utah Speeding Fines	
Excess Speed	Fine
1–10 mph	\$90
11–15 mph	\$115
16–20 mph	\$165
21 – 25 mph	\$240
26 – 30 mph	\$340
31 mph or more	\$440 plus \$10 for every mph over 31

Exhibit Card 3

Florida Speeding Fines	
Excess Speed	Fine
1– 9 mph	\$80.50
10–14 mph	\$155.50
15–19 mph	\$180.50
20 – 29 mph	\$205.50
31 mph or more	\$305.50

Exhibit Card 4

New York Speeding Fines		
Excess Speed	Minimum Fine	Maximum Fine
1– 10 mph	\$45	\$150
11–30 mph	\$90	\$300
31 mph or more	\$180	\$600

The amount of the fine is determined by a court but must be within the ranges shown in the table.

Facilitator says: “Take two minutes to look at the systems on Exhibit Cards 2, 3, and 4.” [Wait two minutes.]

Facilitator asks: “What are some of the similarities and differences between the fine systems used by these states?” [Wait for responses.]

[Similarities may include: fines increase for higher speeds, all have different rules for different excess speeds, there are some speeds where the fine doesn’t increase even though the speed does, etc.]

[Differences may include: some states have higher fines than other states for the same excess speed, fines in New York are decided by the court, each state has a different number of speed ranges for fines, etc.]

Facilitator says: “Now we will use some examples to compare the fines drivers would pay for speeding in each of the states.”
Facilitator displays Table 1 on projector or chalkboard.

Table 1

Example	Massachusetts	Utah	Florida	New York
Driving 76 mph in a 65 mph zone	\$110	\$115	\$155.50	\$90 – \$300
Driving 39 in a 35 mph zone	\$100	\$90	\$80.50	\$45 – \$150

Facilitator says: “Table 1 lists the fine in each state for going a certain speed with a given speed limit. As you can see, the fine for speeding in each state can vary quite a bit, but each state, except New York, has a specific fine for each excess speed.”

Facilitator says: “Since the New York system is so different, let’s take a closer look at it. In New York, it is possible that two people could be fined different amounts for driving the same excess speed.”

Facilitator says: “The minimum fine is the lowest amount a driver can be fined for going a certain excess speed, and the maximum fine is the highest amount a driver can be fined for going a certain excess speed.”

Facilitator asks: “Why might the court decide to give different fines to different people for going the same speed over the speed limit?” [Wait for responses; then introduce examples if needed: previous speeding tickets, driving conditions, causing injury to others, proximity to a school.]

Facilitator says: “You have seen some of the systems states use to determine fines for speeding tickets. Now you will work on a Speeding Ticket task where you will continue to analyze fine systems used to calculate fines for speeding tickets.”

You may begin the associated **Speeding Ticket Performance Task**.

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Exhibit Card 4

New York Speeding Fines		
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