Student 1

1.) In preparation for the Prom, students are researching the costs of two local DJ companies. Music Makers charges a fee of $200 and an additional $ 175per hour. Dance Partners does not charge an initial fee, but charges $225 per hour. Which company would be more cost effective for the prom committee? Write a mathematical argument to support your decision.

Music makers : $200 & $175 per hour

2 hours = $550
3 hours = $750
4 hours = $900

6 hours = $1,250

8 hours = $1,600

Dance Partners : $225 per hour

2 hours = $450
3 hours = $675
4hours = $900

6hours = $1,350

8hours = $1,800

Depending on how many hours you would have the dj for would effect your decision. If you were to have the dj for only 2-3 hours, Dance Partners would be the cheaper choice, yet if you wanted the dj for 4 + hours, music makers would be the best choice.

Student 2

1.) In preparation for the Prom, students are researching the costs of two local DJ companies. Music Makers charges a fee of $200 and an additional $ 175per hour. Dance Partners does not charge an initial fee, but charges $225 per hour. Which company would be more cost effective for the prom committee? Write a mathematical argument to support your decision.

explain

An average prom lasts 4 hours. Assuming the prom would last between 1 and 4 hours, a chart comparing the cost of each DJ companies with the length of the prom is made below

	Music Makers	Dance Partners
1 hour	$375	$225
2 hour	$550	$450
3 hour	$725	$675
4 hour	$900	$900

① ~~Equalues~~ Equation for music makers = $175X + 200 = y$

Equation for DP = $225X = y$

Answer = If the prom was 4 hours long, ~~eable~~ both DJ companies would cost the same. However, anytime less than 4 hours would result in Dance Partners being the most cost effective, as they are cheaper each hour.

Student 3

1.) In preparation for the Prom, students are researching the costs of two local DJ companies. Music Makers charges a fee of $200 and an additional $ 175per hour. Dance Partners does not charge an initial fee, but charges $225 per hour. Which company would be more cost effective for the prom committee? Write a mathematical argument to support your decision.

Music Makers - $200 + $175 per hour

Dance partners - $225 per hour

	MM	DP
1	375	225
2	550	450
3	725	675
4	900	900

It depends how long prom will last to see which DJ is the most cost effective. From one hour to three hours, Dance partners would be cheaper. But if prom was four hours, they would cost the same amount. And, if prom was more than 4 hours, Music Makers would be cheaper.

Student 4

1.) In preparation for the Prom, students are researching the costs of two local DJ companies. Music Makers charges a fee of $200 and an additional $175per hour. Dance Partners does not charge an initial fee, but charges $225 per hour. Which company would be more cost effective for the prom committee? Write a mathematical argument to support your decision.

DJ A
Fee - 200$
+
175 x hours

1 hour = 375
2 hour = 575
3 hour = 750
4 hours = 925
5 hours = 1110

DJ B
Fee - 0$
225 hour

1 hour = 225
2 hour = 450
3 hours = 675
4 hours = 900
5 hours = 1125

Dance partners is most effective because after 3 hours of DJ the cost was only 675.00$ unlike music makers who charged 750.00$. music makers always cost more until 5 hour of DJ and when the cost was 1110.00$ and Dance partners was 1125.00$

Student 5

1.) In preparation for the Prom, students are researching the costs of two local DJ companies. Music Makers charges a fee of $200 and an additional $ 175per hour. Dance Partners does not charge an initial fee, but charges $225 per hour. Which company would be more cost effective for the prom committee? Write a mathematical argument to support your decision.

Even though Music Makers starts with a higher fee because they do $200 plus $175 per hour, Dance Partners will eventually be more expensive because they have a bigger hourly rate.

Dance Partners is $50 more per hour.

So it takes 4 hours to catch up and 50 + 50 + 50 + 50 = 200. make up the initial fee.

At 4 hrs, they are the same.

after that, mm is less because the hourly rate is less.

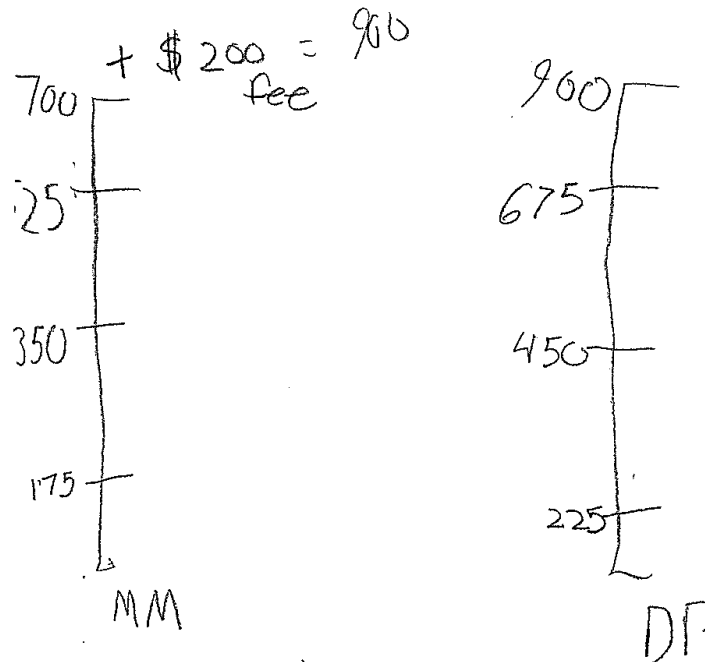4 hs — either one
< 4 hs — Dance Partner
> 4 hrs — Music Makers.

Student 6

1.) In preparation for the Prom, students are researching the costs of two local DJ companies. Music Makers charges a fee of $200 and an additional $ 175per hour. Dance Partners does not charge an initial fee, but charges $225 per hour. Which company would be more cost effective for the prom committee? Write a mathematical argument to support your decision.

$$700 + \$200 = 900 \quad \text{fee}$$

MM
- 700
- 525
- 350
- 175

DP
- 960
- 675
- 450
- 225

Both music companys would
Charge you the same
Mprice for Prom

Student 7

1.) In preparation for the Prom, students are researching the costs of two local DJ companies. Music Makers charges a fee of $200 and an additional $175per hour. Dance Partners does not charge an initial fee, but charges $225 per hour. Which company would be more cost effective for the prom committee? Write a mathematical argument to support your decision.

$$\underset{\text{start}}{\text{Music Makers: \$200}} + \underset{\text{Per hour}}{\text{\$175}}$$

$$\underset{\text{Start initial}}{\text{Dance partners: \$}} \qquad \underset{\text{Per hour}}{\text{\$225}}$$

$$x = 5 \qquad 200 + 175x = 1075$$

$$225x = 1125$$

I think that Dance partners Dj company would be more cost effective. I think this because no matter the amount of hours(x) it will still cost more than Music Makers.

Student 8

1.) In preparation for the Prom, students are researching the costs of two local DJ companies. Music Makers charges a fee of $200 and an additional $ 175per hour. Dance Partners does not charge an initial fee, but charges $225 per hour. Which company would be more cost effective for the prom committee? Write a mathematical argument to support your decision.

$$200 + 175x = C$$
$$225x = C$$

$$225 \cdot (5) = 1125$$
$$200 + 175(5) = 1075$$

$$200 + 175x = 225$$
$$\underline{-175x \quad 175x}$$
$$\frac{200}{50} = \frac{50x}{50}$$
$$4 = x$$

Music Makers is more cost effective if Prom is longer than 4 hours. I know this because the 2 DJs cost the same amount for 4 hours and Music makers cost less when the fith hour hit, but Dance Partners cost less if Prom is less than 4 hours.

Student 9

1.) In preparation for the Prom, students are researching the costs of two local DJ companies. Music Makers charges a fee of $200 and an additional $ 175per hour. Dance Partners does not charge an initial fee, but charges $225 per hour. Which company would be more cost effective for the prom committee? Write a mathematical argument to support your decision.

(plus in)

Music makers: $175x + 200$

Dance partners: $225x$

Answer: Music Makers will be more cost effective if if you rent this company for over 4 hours. But if your rentairs the group for only four hours, they both will be good because they both cost $900 at 4 hours. But if you rent it for less than 4 hours, Dance Partners would be better.

Student 10

1.) In preparation for the Prom, students are researching the costs of two local DJ companies. Music Makers charges a fee of $200 and an additional $ 175per hour. Dance Partners does not charge an initial fee, but charges $225 per hour. Which company would be more cost effective for the prom committee? Write a mathematical argument to support your decision.
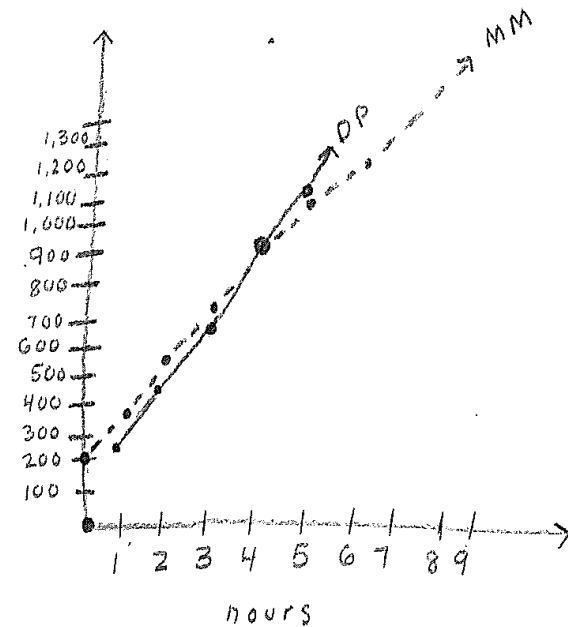
$MM = 175x + 200$

$DP = 225x$

$225x = 175x + 200$

$-175x \quad -175x$

$\dfrac{50x}{50} = \dfrac{200}{50}$

$x = 4$

	MM	DP
0	200	0
1	375	225
2	550	450
3	725	675
4	900	900
5	1075	1125
6	1250	1350

If the prom will last less than 4 hours they should go with Dance Partners if it will last more than 4 hours they should go with music makers, if it will last exactly 4 hours it will not matter because it will be the same price