Best Buy Tickets

T1

Susie is organizing the printing of tickets for a show her friends are producing.
She has collected prices from several printers and these two seem to be the best.

SURE PRINT
Ticket printing
25 tickets for $2

BEST PRINT
Tickets printed
$10 setting up
plus
$1 for 25 tickets

Susie wants to go for the best buy

She doesn't yet know how many people are going to come.

Show Susie a couple of ways in which she could make the right decision, whatever the number.

Illustrate your advice with a couple of examples.

Best Print

$2\left(\frac{x}{25}\right) > 10 + \frac{x}{25}$

$\frac{2x}{25} > 10 + \frac{x}{25}$

$\frac{x}{25} > 10$

$x > 250$ tickets

Best Print will be the best buy for more than 250 tickets.

sure print

$10 + \frac{x}{25} > 2\left(\frac{x}{25}\right)$ ✓

$10 + \frac{x}{25} > \frac{2x}{25}$ 4

$10 > \frac{x}{25}$

$x < 250$ tickets 4

Sure Print will be the best buy for less than 250 tickets 2

Please continue your work on the page opposite

T1

Best Buy Tickets (continued)

Ex. 249 tickets		Ex. 251 tickets	
Best Print	Sure Print	Best Print	Sure Print
$10 + \frac{249}{25} = x$	$x = 2(\frac{249}{25})$	$10 + \frac{251}{25} = x$	$x = 2(\frac{251}{25})$
$x = \$19.96$	$x = \$19.92$	$x = \$20.04$	$x = \$20.08$
$\$19.96 > \$19.92$		$\$20.04 < \$20.08$	
Sure Print is the better buy.		Best Print is the better buy.	

Best Buy Tickets

T2

Susie is organizing the printing of tickets for a show her friends are producing.
She has collected prices from several printers and these two seem to be the best.

SURE PRINT
Ticket printing
25 tickets for $2

BEST PRINT
Tickets printed
$10 setting up
plus
$1 for 25 tickets

Susie wants to go for the best buy

She doesn't yet know how many people are going to come.

Show Susie a couple of ways in which she could make the right decision, whatever the number.

Illustrate your advice with a couple of examples.

For the sure print, It costs 0.08 cents per person
The Best Print cost 0.04 cents per person, plus a 10 dollar set up fee. assume the number of people as x. when the printing cost for both printers are the same, it doesn't matter what one to buy. So when $0.08x = 0.04x + 10$, I doesn't matter where you buy

Please continue your work on the page opposite

T2

Best Buy Tickets (continued)

the tickets. $0.04x = 10$, $x = 250$, If there are 250 people buying, It dosent matter which printer you use. If there are less than 250 people buying, it is better to buy from Sure print, If there are more 250 people buying, it is better to buy from Best Print

4

$0.08x = 0.04x + 10$

$0.04x = 10$

$x = 250$

4

2

$0.04 \overline{)1000}$ 250

8

20

20

CCR 3

10

Best Buy Tickets

T3

Susie is organizing the printing of tickets for a show her friends are producing.
She has collected prices from several printers and these two seem to be the best.

SURE PRINT
Ticket printing
25 tickets for $2

BEST PRINT
Tickets printed
$10 setting up
plus
$1 for 25 tickets

Susie wants to go for the best buy

She doesn't yet know how many people are going to come.

Show Susie a couple of ways in which she could make the right decision, whatever the number.

Illustrate your advice with a couple of examples.

The cost of sure prints is represented by $2(\frac{x}{25})$. Best print is $10+\frac{x}{25}$. ✓ 4

for sureprint to cost less than best print, $(2)\frac{x}{25} < 10+\frac{x}{25} = 2x < 250+x$

$x < 250$. So if the # of people is less than 250, use sure print. ✓ 4

For Best Print to be the best choice, $10+\frac{x}{25} < 2\frac{x}{25} = 250+x < 2x = 250 < x$

$x > 250$. So # of people must be over 250, in order for Best print to 2

be cheaper than sure print. So if less than 250 people go, use ✓

Sure Print, if more than 250 people go, use Best Print.

Please continue your work on the page opposite

Best Buy Tickets (continued)

Since you don't know how many will go, ask for the number of people who went last year. Use that number and add some if you want. Or, you can just buy however many tickets according to the # of seats.

Best Buy Tickets

T4

Susie is organizing the printing of tickets for a show her friends are producing.
She has collected prices from several printers and these two seem to be the best.

SURE PRINT
Ticket printing
25 tickets for $2

2

BEST PRINT
Tickets printed
$10 setting up
plus
$1 for 25 tickets

Susie wants to go for the best buy

She doesn't yet know how many people are going to come.

Show Susie a couple of ways in which she could make the right decision, whatever the number.

Illustrate your advice with a couple of examples.

Best Print Sure Print

$10+\frac{x}{25} > 2(\frac{x}{25}) \rightarrow 10+\frac{x}{25} > \frac{2x}{25} \rightarrow 250+x > 2x \rightarrow 250 > x \rightarrow x < 250$ 4

4

If the number of people going is less than 250, than sure print has the better deal, if more than 250 people are going, than it's better to use best print;

Ex. 225 people going Sure print: $225 \div 25 = 9$ $9 \cdot 2 = \$18$

best print: $10 + (225 \div 25) = 10 + 9 = \$19$

Sure Print is cheaper

if 250 going, both cost the same

2

Ex. 250 people going to show sure print: $250 \div 25 = 10$ $10 \cdot 2 = \$20$

Please continue your work on the page opposite

T4

Best Buy Tickets (continued)

best print (10)+(250÷25)=$20

Both cost the same

Ex: 275 people going sure print: 275÷25=11 11·2=$22

best print: (10)+(275÷25)=$21

Best Print now has the better deal

Best Buy Tickets

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She has collected prices from several printers and these two seem to be the best.

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Ticket printing
25 tickets for $2

BEST PRINT
Tickets printed
$10 setting up
plus
$1 for 25 tickets

Susie wants to go for the best buy

She doesn't yet know how many people are going to come.

Show Susie a couple of ways in which she could make the right decision, whatever the number.

Illustrate your advice with a couple of examples.

2.

Sure Print

# of tickets	$ SurePrint	Best Print $	unless you
25	2	11	are buying
50	4	12	250 tickets or ✓
75	6	13	more SurePrint
100	8	14	is cheaper. ✓
125	10	15	

5 1 1 1

Please continue your work on the page opposite

T5

Best Buy Tickets (continued)

# of tickets	$ Sure P.	Best Print $	
175	14	17	✓
200	16	18	
225	18	19	
250	20	20	Same ✓
275	22	21	Best Print cheaper