



New York State Testing Program

Mathematics Test

Grade **8**

2009 Scoring Guide Part 2

37

Jeff wants to buy a phone card for long-distance calls. He can buy a 200-minute card for \$10.00 or a 300-minute card for \$12.00. Which card is the better value?

Show your work.

Answer _____

QUESTION 37

STRAND 4: MEASUREMENT

Complete and Correct Response:

- $10 \div 200 = 0.05$
 $12 \div 300 = 0.04$
OR other valid process

AND

- The 300-minute phone card

OR

The \$12.00 phone card

Score Points:

Apply 2-point holistic rubric.

37

Jeff wants to buy a phone card for long-distance calls. He can buy a 200-minute card for \$10.00 or a 300-minute card for \$12.00. Which card is the better value?

Show your work.

$$10 \div 200 = 0.05$$

$$12 \div 300 = 0.04$$

$$0.04 < 0.05$$

Answer 300 minute card for \$12

This response is complete and correct.

Score Point 2

37

Jeff wants to buy a phone card for long-distance calls. He can buy a 200-minute card for \$10.00 or a 300-minute card for \$12.00. Which card is the better value?

Show your work

~~$\frac{10}{200} = \frac{x}{1}$~~
 ~~$\frac{10}{200} = \frac{200x}{200}$~~
 $105 = x$

~~$\frac{12}{300} = \frac{x}{1}$~~
 ~~$\frac{12}{300} = \frac{300x}{300}$~~
 $104 = x$

Answer the 300-minute card

This response is complete and correct. The sound mathematical procedure of finding the price per minute is demonstrated, and a correct answer is provided.

Score Point 2

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Show your work.

$$10 \overline{) 200} = 20 \text{ m per } \$1$$

$$12 \overline{) 300} = 25 \text{ m per } \$1$$

Answer 300-minute card

This response is complete and correct. The sound mathematical procedure of finding the number of minutes per dollar spent is demonstrated, and the correct answer is provided.

Score Point 2

- 37 Jeff wants to buy a phone card for long-distance calls. He can buy a 200-minute card for \$10.00 or a 300-minute card for \$12.00. Which card is the better value?

Show your work.

$$200 \text{ min} = \$10 \leftarrow 10 \text{ cents/min}$$

$$\frac{200}{10} = \frac{1}{x}$$

$$\frac{10 = 200x}{\frac{200}{200} \quad \frac{200}{200}}$$

$$.1 = x$$

Answer 300-min for \$12.00

$$300 \text{ min} = \$12 \leftarrow 4 \text{¢/mi}$$

$$\frac{300}{12} = \frac{1}{x}$$

$$\frac{12 = 300x}{\frac{300}{300} \quad \frac{300}{300}}$$

$$.04 = x$$

This response is only partially correct. A correct answer and sound mathematical procedure are provided; however, the work shown contains an incorrect mathematical statement.

Score Point 1

37

Jeff wants to buy a phone card for long-distance calls. He can buy a 200-minute card for \$10.00 or a 300-minute card for \$12.00. Which card is the better value?

Show your work.

$$\frac{10}{200} = .05$$

$$\frac{12}{300} = .04$$

Answer 200-minute card.

This response is only partially correct. A sound mathematical procedure is provided; however, an incorrect answer is given.

Score Point 1

37

Jeff wants to buy a phone card for long-distance calls. He can buy a 200-minute card for \$10.00 or a 300-minute card for \$12.00. Which card is the better value?

Show your work.

Answer 300-minute card

This response is only partially correct. The correct answer is provided; however, no work is shown.

Score Point 1

37

Jeff wants to buy a phone card for long-distance calls. He can buy a 200-minute card for \$10.00 or a 300-minute card for \$12.00. Which card is the better value?

Show your work.

$$\frac{X}{10.00} = \frac{1200}{100}$$
$$X = \frac{1000 \times 12.00}{100} = 1.2$$

Answer 1.2

This response is incorrect.

Score Point 0



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Mathematics Test

Grade **8**

2009 Practice Test

37

Jeff wants to buy a phone card for long-distance calls. He can buy a 200-minute card for \$10.00 or a 300-minute card for \$12.00. Which card is the better value?

Show your work.

$$10 \times 7 = 70 \text{¢ per week}$$
$$12 \times 7 = 84 \text{¢ per week}$$

Answer 200-minute

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Jeff wants to buy a phone card for long-distance calls. He can buy a 200-minute card for \$10.00 or a 300-minute card for \$12.00. Which card is the better value?

Show your work.

$$\frac{10}{200} = .05 \quad \frac{12}{300} = .04$$

Answer a 300 minute card for \$12.00

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Jeff wants to buy a phone card for long-distance calls. He can buy a 200-minute card for \$10.00 or a 300-minute card for \$12.00. Which card is the better value?

Show your work.

Answer \$12.00

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Show your work.

$$\begin{array}{r|l} 300 & 12 \\ \hline 600 & 24 \end{array}$$

$$\begin{array}{r|l} 200 & 10 \\ \hline 400 & 20 \\ \hline 600 & 30 \end{array}$$

Answer 300 - minute Card

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Show your work.

$$\frac{12.00}{300} \quad \frac{10.00}{200} \quad \$0.05$$

\$0.40

Answer 200 minute card

8th GRADE MATHEMATICS

Name: _____

PRACTICE SET ANSWER KEY

PS 1	(0-2)	1
PS 2	(0-2)	1
PS 3	(0-2)	0
PS 4	(0-2)	1
PS 5	(0-2)	2
PS 6	(0-2)	2
PS 7	(0-2)	0
PS 8	(0-2)	2
PS 9	(0-2)	1
PS 10	(0-2)	2
PS 11	(0-2)	2
PS 12	(0-2)	0
PS 13	(0-2)	1
PS 14	(0-2)	1
PS 15	(0-2)	2
PS 16	(0-2)	2
PS 17	(0-2)	1
PS 18	(0-2)	0
PS 19	(0-2)	2
PS 20	(0-2)	1
PS 21	(0-3)	2
PS 22	(0-3)	3
PS 23	(0-3)	0
PS 24	(0-3)	1
PS 25	(0-3)	2

PS 26	(0-3)	3
PS 27	(0-3)	1
PS 28	(0-3)	0
PS 29	(0-3)	1
PS 30	(0-3)	2
PS 31	(0-2)	1
PS 32	(0-2)	0
PS 33	(0-2)	2
PS 34	(0-2)	2
PS 35	(0-2)	1
PS 36	(0-2)	1
PS 37	(0-2)	2
PS 38	(0-2)	1
PS 39	(0-2)	1
PS 40	(0-2)	2
PS 41	(0-2)	1
PS 42	(0-2)	0
PS 43	(0-2)	2
PS 44	(0-2)	2
PS 45	(0-2)	1
PS 46	(0-2)	0
PS 47	(0-2)	2
PS 48	(0-2)	1
PS 49	(0-2)	2
PS 50	(0-2)	1

