| A |  |  |  | \# Correct |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $9 \times 10=$ | 23 | $73 \times 1,000=$ |  |
| 2 | $9 \times 100=$ | 24 | $60 \times 10=$ |  |
| 3 | $9 \times 1,000=$ | 25 | $600 \times 10=$ |  |
| 4 | $8 \times 10=$ | 26 | $600 \times 100=$ |  |
| 5 | $80 \times 10=$ | 27 | $65 \times 100=$ |  |
| 6 | $80 \times 100=$ | 28 | $652 \times 100=$ |  |
| 7 | $80 \times 1,000=$ | 29 | $342 \times 100=$ |  |
| 8 | $7 \times 10=$ | 30 | $800 \times 100=$ |  |
| 9 | $70 \times 10=$ | 31 | $800 \times 1,000=$ |  |
| 10 | $700 \times 10=$ | 32 | $860 \times 1,000=$ |  |
| 11 | $700 \times 100=$ | 33 | $867 \times 1,000=$ |  |
| 12 | $700 \times 1,000=$ | 34 | $492 \times 1,000=$ |  |
| 13 | $2 \times 10=$ | 35 | $34 \times 10=$ |  |
| 14 | $30 \times 10=$ | 36 | $629 \times 10=$ |  |
| 15 | $32 \times 10=$ | 37 | $94 \times 100=$ |  |
| 16 | $4 \times 10=$ | 38 | $238 \times 100=$ |  |
| 17 | $50 \times 10=$ | 39 | $47 \times 1,000=$ |  |
| 18 | $54 \times 10=$ | 40 | $294 \times 1,000=$ |  |
| 19 | $37 \times 10=$ | 41 | $174 \times 100=$ |  |
| 20 | $84 \times 10=$ | 42 | $285 \times 1,000=$ |  |
| 21 | $84 \times 100=$ | 43 | $951 \times 100=$ |  |
| 22 | $84 \times 1,000=$ | 44 | $129 \times 1,000=$ |  |

B
Improvement $\qquad$ \# Correct $\qquad$

| Multiply. |  | 23 | $37 \times 1,000=$ |  |  |
| :---: | :---: | :--- | :---: | :---: | :---: |
| 1 | $8 \times 10=$ |  | 24 | $50 \times 10=$ |  |
| 2 | $8 \times 100=$ |  | 25 | $500 \times 10=$ |  |
| 3 | $8 \times 1,000=$ |  | 26 | $500 \times 100=$ |  |
| 4 | $7 \times 10=$ |  | 27 | $56 \times 100=$ |  |
| 5 | $70 \times 10=$ |  | 28 | $562 \times 100=$ |  |
| 6 | $70 \times 100=$ |  | 29 | $432 \times 100=$ |  |
| 7 | $70 \times 1,000=$ |  | 30 | $700 \times 100=$ |  |
| 8 | $6 \times 10=$ |  | 31 | $700 \times 1,000=$ |  |
| 9 | $60 \times 10=$ |  | 32 | $760 \times 1,000=$ |  |
| 10 | $600 \times 10=$ |  | 34 | $765 \times 1,000=$ |  |
| 11 | $600 \times 100=$ |  | 35 | $74 \times 10=$ |  |
| 12 | $600 \times 1,000=$ |  | 36 | $269 \times 10=$ |  |
| 13 | $3 \times 10=$ |  | 37 | $49 \times 100=$ |  |
| 14 | $20 \times 10=$ |  | 38 | $328 \times 100=$ |  |
| 15 | $23 \times 10=$ |  | 39 | $37 \times 1,000=$ |  |
| 16 | $5 \times 10=$ |  | 40 | $924 \times 1,000=$ |  |
| 17 | $40 \times 10=$ |  | 41 | $147 \times 100=$ |  |
| 18 | $45 \times 10=$ |  | 42 | $825 \times 1,000=$ |  |
| 19 | $73 \times 10=$ |  | 43 | $651 \times 100=$ |  |
| 20 | $48 \times 10=$ |  | 44 | $192 \times 1,000=$ |  |
| 21 | $48 \times 100=$ |  |  |  |  |
| 22 | $48 \times 1,000=$ |  |  |  |  |
|  |  |  |  |  |  |

Name $\qquad$ Date $\qquad$

1. Round the factors to estimate the products.
a. $597 \times 52 \approx$ $\qquad$ $\times$ $\qquad$ $=$ $\qquad$

A reasonable estimate for $597 \times 52$ is $\qquad$ .
b. $1,103 \times 59 \approx$ $\qquad$ $\times$ $\qquad$ $=$ $\qquad$

A reasonable estimate for $1,103 \times 59$ is $\qquad$ .
c. $5,840 \times 25 \approx$ $\qquad$ $\times$ $\qquad$
$\qquad$

A reasonable estimate for $5,840 \times 25$ is $\qquad$ .
2. Complete the table using your understanding of place value and knowledge of rounding to estimate the product.

| Factors | Rounded Factors | Estimate |
| :--- | :--- | :---: | :--- |
| a. $2,809 \times 42$ | $3,000 \times 40$ | 120,000 |
| b. $28,090 \times 420$ |  |  |
| c. $8,932 \times 59$ |  |  |
| d. 89 tens $\times 63$ tens |  |  |
| e. 398 hundreds $\times 52$ tens |  |  |

3. For which of the following expressions would 200,000 be a reasonable estimate? Explain how you know.
$2,146 \times 12$
$21,467 \times 121$
$2,146 \times 121$
$21,477 \times 1,217$
4. Fill in the missing factors to find the given estimated product.
a. $571 \times 43 \approx$ $\qquad$ $\times$ $\qquad$ $=24,000$
b. $726 \times 674 \approx$ $\qquad$ $\times$ $\qquad$ $=490,000$
c. $8,379 \times 541 \approx$ $\qquad$ $\times$ $\qquad$ $=4,000,000$
5. There are 19,763 tickets available for a New York Knicks home game. If there are 41 home games in a season, about how many tickets are available for all the Knicks' home games?
6. Michael saves $\$ 423$ dollars a month for college.
a. About how much money will he have saved after 4 years?
b. Will your estimate be lower or higher than the actual amount Michael will save? How do you know?

Name
Date $\qquad$

1. Round the factors and estimate the products.
a. $656 \times 106 \approx$
b. $3,108 \times 7,942 \approx$
c. $425 \times 9,311 \approx$
d. $8,633 \times 57,008 \approx$

Name $\qquad$ Date $\qquad$

1. Round the factors to estimate the products.
a. $697 \times 82 \approx$ $\qquad$ $\times$ $\qquad$ $=$ $\qquad$

A reasonable estimate for $697 \times 82$ is $\qquad$ .
b. $5,897 \times 67 \approx$ $\qquad$ $\times$ $\qquad$ $=$ $\qquad$

A reasonable estimate for $5,897 \times 67$ is $\qquad$ .
c. $8,840 \times 45 \approx$ $\qquad$ $\times$ $\qquad$ $=$ $\qquad$

A reasonable estimate for $8,840 \times 45$ is $\qquad$ .
2. Complete the table using your understanding of place value and knowledge of rounding to estimate the product.

| Factors | Rounded Factors | Estimate |
| :--- | :---: | :---: |
| a. $3,409 \times 73$ | $3,000 \times 70$ | 210,000 |
| b. $82,290 \times 240$ |  |  |
| c. $9,832 \times 39$ |  |  |
| d. 98 tens $\times 36$ tens |  |  |
| e. 893 hundreds $\times 85$ tens |  |  |

3. The estimated answer to a multiplication problem is 800,000 . Which of the following expressions could result in this answer? Explain how you know.
$8,146 \times 12$
$81,467 \times 121$
$8,146 \times 121$
$81,477 \times 1,217$
4. Fill in the blank with the missing estimate.
a. $751 \times 34 \approx$ $\qquad$ $\times$ $\qquad$ $=24,000$
b. $627 \times 674 \approx$ $\qquad$ $\times$ $\qquad$ $=420,000$
c. $7,939 \times 541 \approx$ $\qquad$ $\times$ $\qquad$ $=4,000,000$
5. In a single season the New York Yankees sell an average of 42,362 tickets for each of their 81 home games. About how many tickets do they sell for an entire season of home games?
6. Raphael wants to buy a new car.
a. He needs a down payment of $\$ 3,000$. If he saves $\$ 340$ each month, about how many months will it take him to save the down payment?
b. His new car payment will be $\$ 288$ each month for five years. What is the total of these payments?
