Chapter 3 Practice Test

____ 1. In July, traffic officers wrote an average of 34 tickets each day. In August, they wrote an average of 47 tickets each day. How many more tickets did traffic officers write in August than in July? (Hint: July and August have 31 days each.)

A. 403
B. 1,045
C. 1,457
D. 2,511

____ 2. An arena's lower-level section has 32 rows with 50 seats in each row. The upper-level section has 28 rows with 42 seats in each row. How many more seats are in the lower-level section than in the upper-level section?

A. 400
B. 424
C. 1,176
D. 1,600

____ 3. A concert hall has seats on a main floor and in a balcony. The main floor has 24 rows of 28 seats in each row. The balcony has 9 rows of 22 seats in each row. How many more seats are on the main floor than in the balcony?

A. 870
B. 672
C. 474
D. 198

4. A chess club orders a T-shirt and a notebook for each of its 24 members. Each T-shirt costs $13, and each notebook costs $2 each. How much more do the T-shirts cost in all than the notebooks? Explain how you found your answer.

____ 5. Mrs. Yang types 80 words in one minute. At that rate, how many words can she type in 15 minutes?

A. 120
B. 800
C. 1,200
D. 1,600

____ 6. Teneka repeats a tongue twister 20 times in one minute. At that rate, how many times could she repeat the tongue twister in 12 minutes?

A. 24
B. 32
C. 120
D. 240

____ 7. Ben swam laps in a pool nonstop for 11 minutes. There are 60 seconds in 1 minute. What is the total number of seconds Ben swam?

A. 6,600 seconds
B. 710 seconds
C. 660 seconds
D. 600 seconds

____ 8. People can join a skating club by paying $40 a year. The club had 67 members this year. How much money in all did the skating club collect from members this year?

A. $268
B. $2,680
C. $3,220
D. $26,800

9. Cole wants to find the product of 40×50. Explain how he can know how many zeros the product should have.

____ 10. Doug rents a kayak for 12 days. The rental charge is $18 per day. Which is the **best** estimate for the total cost of the kayak rental?

A. about $400
B. about $200
C. about $160
D. about $120

____ 11. Mr. Yu travels 44 miles for work every week. He worked 42 weeks last year. Which is the **best** estimate of the number of miles Mr. Yu traveled for work last year?

A. about 2,000 miles
B. about 3,000 miles
C. about 8,000 miles
D. about 10,000 miles

____ 12. Cat cages cost $27 each. A cat hospital bought 12 new cages. Which is the **best** estimate of the total cost of the new cages?

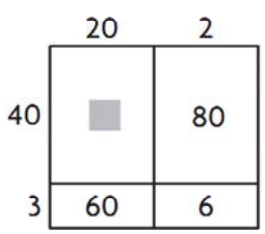
A. $600
B. $300
C. $270
D. $200

____ 13. On Friday, 17 buses left the bus station. Each bus carried a full load of 53 passengers. Which is the **best** way to estimate the total number of passengers who left the bus station that day?

A. $7 \times 50 = 350$
B. $10 \times 50 = 500$
C. $10 \times 60 = 600$
D. $20 \times 50 = 1,000$

14. A total of 47 students attended a bike rally. They each rode 23 miles in the rally. Explain how you would estimate the total number of miles the students rode.

Use the model to answer the question.



____ 15. What partial product is missing from the model?

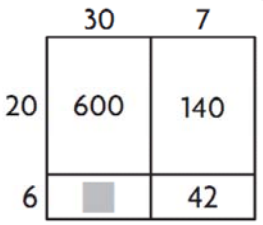
A. 60
B. 80
C. 600
D. 800

____ 16. What is the product?

43×22

A. 172
B. 846
C. 946
D. 1,286

Use the model to answer the question.



____ 17. What partial product is missing from the model?

A. 36
B. 120
C. 180
D. 300

____ 18. What is the product?

26×37

A. 962
B. 782
C. 780
D. 260

19. This model for 45×34 has two partial products shown. Explain how to find the other partial products, and how to use the partial products to find the final product.

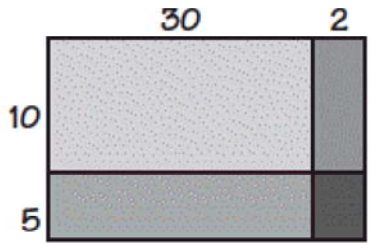
____ 20. Lisa jumps rope at a rate of 86 jumps per minute. At this rate, what is the total number of times Lisa will jump in 15 minutes?

A. 1,200
B. 1,275
C. 1,290
D. 1,740

____ 21. Students arranged 13 chairs in each of 32 rows for the school play. What is the total number of chairs the students arranged?

A. 300
B. 320
C. 384
D. 416

____ 22. Rosa's vegetable garden has 15 rows of 32 corn plants each.



How many corn plants are in Rosa's vegetable garden?

A. 480
B. 465
C. 450
D. 300

____ 23. Some students are reorganizing supplies in the art room. They put 25 crayons in each of 24 boxes. What is the total number of crayons the students put into boxes?

A. 760
B. 600
C. 582
D. 200

24. Mrs. Taylor bought 16 tickets to an amusement park. She paid $18 for each ticket. Explain how to use partial products to find how much money Mrs. Taylor paid for all of the tickets.

____ 25. A farmer planted 29 rows of apple trees. There are 27 trees in each row. How many apple trees did the farmer plant altogether?

A. 261
B. 723
C. 783
D. 1,881

____ 26. Maria packed 24 bags of dog treats for the animal shelter. She put 16 dog treats in each bag. What is the total number of dog treats Maria packed?

A. 168
B. 240
C. 384
D. 624

____ 27. Keiko can text 55 words each minute. At this rate, how many words will Keiko text in 15 minutes?

A. 825
B. 805
C. 705
D. 330

____ 28. There are 96 word search puzzles in a puzzle book. Each puzzle has 22 words. How many words in all does the puzzle book have?

A. 384
B. 2,002
C. 2,012
D. 2,112

29. A store is having a sale on the Model Z DVD player. The sale price for Model Z is $67. Will the store collect more or less than $1,500 if 22 of these players are sold? Explain.

____ 30. Gabe runs on a treadmill for 45 minutes every morning. His body uses about 12 calories per minute to keep him moving. How many calories does Gabe use during his run?

A. 135
B. 440
C. 540
D. 580

____ 31. A youth center sold raffle tickets to raise money for supplies. They sold 62 books of raffle tickets for $18 each. How much money did the youth center raise?

A. $1,116
B. $1,016
C. $816
D. $558

____ 32. A store sold 52 shirts on Saturday for $28 each. What is the total amount customers paid for the shirts?

A. $1,040
B. $1,046
C. $1,440
D. $1,456

____ 33. There are 68 students in the book club. Each student reads 14 books during summer vacation. How many books do the students read in all during summer vacation?

A. 340
B. 922
C. 952
D. 1,020

34. Rachel spends 35 minutes every day exercising. How many minutes will she spend exercising during a 28-day period? Explain how you found your answer.

Chapter 3 Practice Test
Answer Section

1. ANS: A PTS: 1 DIF: average
   REF: Lesson 5: Problem Solving • Multiply 2-Digit Numbers
   OBJ: Use the strategy draw a diagram to solve multistep multiplication problems.
   NAT: CC.4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
   TOP: Use the four operations with whole numbers to solve problems.
   NOT: Operations and Algebraic Thinking
2. ANS: B PTS: 1 DIF: average
   REF: Lesson 5: Problem Solving • Multiply 2-Digit Numbers
   OBJ: Use the strategy draw a diagram to solve multistep multiplication problems.
   NAT: CC.4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
   TOP: Use the four operations with whole numbers to solve problems.
   NOT: Operations and Algebraic Thinking
3. ANS: C PTS: 1 DIF: average
   REF: Lesson 5: Problem Solving • Multiply 2-Digit Numbers
   OBJ: Use the strategy draw a diagram to solve multistep multiplication problems.
   NAT: CC.4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
   TOP: Use the four operations with whole numbers to solve problems.
   NOT: Operations and Algebraic Thinking

4. ANS:
   $264 more; Possible explanation: I found 24×13 and 24×2, and then subtracted to find the difference in cost. $312 - 48 = 264$. The T-shirts cost $264 more than the notebooks.

   PTS: 1 DIF: average
   REF: Lesson 5: Problem Solving • Multiply 2-Digit Numbers
   OBJ: Use the strategy draw a diagram to solve multistep multiplication problems.
   NAT: CC.4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
   TOP: Use the four operations with whole numbers to solve problems.
   NOT: Operations and Algebraic Thinking
5. ANS: C PTS: 1 DIF: average
   REF: Lesson 31: Multiply by Tens
   OBJ: Use place value and multiplication properties to multiply by tens.
   NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
   TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: factor | product
   NOT: Number and Operations in Base Ten
6. ANS: D PTS: 1 DIF: average
   REF: Lesson 31: Multiply by Tens
   OBJ: Use place value and multiplication properties to multiply by tens.
   NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
   TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: factor | product
   NOT: Number and Operations in Base Ten

7. ANS: C PTS: 1 DIF: average
   REF: Lesson 31: Multiply by Tens
   OBJ: Use place value and multiplication properties to multiply by tens.
   NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
   TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: factor | product
   NOT: Number and Operations in Base Ten
8. ANS: B PTS: 1 DIF: average
   REF: Lesson 31: Multiply by Tens
   OBJ: Use place value and multiplication properties to multiply by tens.
   NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
   TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: factor | product
   NOT: Number and Operations in Base Ten
9. ANS:
   Possible answer: the product will have 2 zeros because both factors are multiples of 10. It also has a third zero because 4×5 is 20.
   $40 \times 50 = 2,000$.

   PTS: 1 DIF: average REF: Lesson 31: Multiply by Tens
   OBJ: Use place value and multiplication properties to multiply by tens.
   NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
   TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: factor | product
   NOT: Number and Operations in Base Ten

10. ANS: B PTS: 1 DIF: average
REF: Lesson 32: Estimate Products
OBJ: Estimate products by rounding or by using compatible numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
KEY: round | estimate | compatible numbers
NOT: Number and Operations in Base Ten
11. ANS: A PTS: 1 DIF: average
REF: Lesson 32: Estimate Products
OBJ: Estimate products by rounding or by using compatible numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
KEY: round | estimate | compatible numbers
NOT: Number and Operations in Base Ten
12. ANS: B PTS: 1 DIF: average
REF: Lesson 32: Estimate Products
OBJ: Estimate products by rounding or by using compatible numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
KEY: round | estimate | compatible numbers
NOT: Number and Operations in Base Ten

13. ANS: D PTS: 1 DIF: average
REF: Lesson 32: Estimate Products
OBJ: Estimate products by rounding or by using compatible numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
KEY: round | estimate | compatible numbers
NOT: Number and Operations in Base Ten
14. ANS:
Possible answer: I would round each factor to the nearest ten: 47 rounded to the nearest ten is 50 and 23 rounded to the nearest ten is 20. Then I would multiply using the rounded numbers and mental math, $50 \times 20 = 1{,}000$ miles.

PTS: 1 DIF: average REF: Lesson 32: Estimate Products
OBJ: Estimate products by rounding or by using compatible numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
KEY: round | estimate | compatible numbers
NOT: Number and Operations in Base Ten
15. ANS: D PTS: 1 DIF: average
REF: Lesson 33: Investigate • Area Models and Partial Products
OBJ: Use area models and partial products to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: partial product
NOT: Number and Operations in Base Ten

16. ANS: C PTS: 1 DIF: average
REF: Lesson 33: Investigate • Area Models and Partial Products
OBJ: Use area models and partial products to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: partial product
NOT: Number and Operations in Base Ten
17. ANS: C PTS: 1 DIF: average
REF: Lesson 33: Investigate • Area Models and Partial Products
OBJ: Use area models and partial products to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: partial product
NOT: Number and Operations in Base Ten
18. ANS: A PTS: 1 DIF: average
REF: Lesson 33: Investigate • Area Models and Partial Products
OBJ: Use area models and partial products to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: partial product
NOT: Number and Operations in Base Ten

19. ANS:
Possible answer: the missing partial products are $40 \times 4 = 160$ on the top right, and $5 \times 4 = 20$ on the lower right. The final product is the sum of $1,200 + 160 + 150 + 20$, which is 1,530.

PTS: 1 DIF: average
REF: Lesson 33: Investigate • Area Models and Partial Products
OBJ: Use area models and partial products to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: partial product
NOT: Number and Operations in Base Ten

20. ANS: C PTS: 1 DIF: average
REF: Lesson 34: Multiply Using Partial Products
OBJ: Use place value and partial products to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
NOT: Number and Operations in Base Ten

21. ANS: D PTS: 1 DIF: average
REF: Lesson 34: Multiply Using Partial Products
OBJ: Use place value and partial products to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
NOT: Number and Operations in Base Ten

22. ANS: A PTS: 1 DIF: average
REF: Lesson 34: Multiply Using Partial Products
OBJ: Use place value and partial products to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
NOT: Number and Operations in Base Ten

23. ANS: B PTS: 1 DIF: average
REF: Lesson 34: Multiply Using Partial Products
OBJ: Use place value and partial products to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
NOT: Number and Operations in Base Ten

24. ANS:
I know I have to find four partial products: $10 \times 10 = 100$, $10 \times 6 = 60$, $8 \times 10 = 80$, and $8 \times 6 = 48$. Then I add the 4 partial products: $100 + 60 + 80 + 48 = 288$. So, Mrs. Taylor spent $288 on all the tickets.

PTS: 1 DIF: average
REF: Lesson 34: Multiply Using Partial Products
OBJ: Use place value and partial products to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
NOT: Number and Operations in Base Ten

25. ANS: C PTS: 1 DIF: average
REF: Lesson 35: Multiply with Regrouping
OBJ: Use regrouping to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: regroup
NOT: Number and Operations in Base Ten
26. ANS: C PTS: 1 DIF: average
REF: Lesson 35: Multiply with Regrouping
OBJ: Use regrouping to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: regroup
NOT: Number and Operations in Base Ten
27. ANS: A PTS: 1 DIF: average
REF: Lesson 35: Multiply with Regrouping
OBJ: Use regrouping to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: regroup
NOT: Number and Operations in Base Ten

28. ANS: D PTS: 1 DIF: average
REF: Lesson 35: Multiply with Regrouping
OBJ: Use regrouping to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: regroup
NOT: Number and Operations in Base Ten

29. ANS:
Less; Possible explanation: first, I estimated by rounding \$67 to \$70 and 22 to 20: $20 \times \$70 = \$1,400$. Then, I multiplied $22 \times \$67 = \$1,474$, regrouping when needed. The amount is close to \$1,500, but is less.

PTS: 1 DIF: average
REF: Lesson 35: Multiply with Regrouping
OBJ: Use regrouping to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic. KEY: regroup
NOT: Number and Operations in Base Ten

30. ANS: C PTS: 1 DIF: average
REF: Lesson 36: Choose a Multiplication Method
OBJ: Choose a method to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
NOT: Number and Operations in Base Ten

31. ANS: A PTS: 1 DIF: average
REF: Lesson 36: Choose a Multiplication Method
OBJ: Choose a method to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
NOT: Number and Operations in Base Ten
32. ANS: D PTS: 1 DIF: average
REF: Lesson 36: Choose a Multiplication Method
OBJ: Choose a method to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
NOT: Number and Operations in Base Ten
33. ANS: C PTS: 1 DIF: average
REF: Lesson 36: Choose a Multiplication Method
OBJ: Choose a method to multiply 2-digit numbers.
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TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
NOT: Number and Operations in Base Ten

34. ANS:
980 minutes; Possible explanation: I multiplied the number of minutes Rachel exercised every day by the number of days. First, I multiplied 35 by 8 ones: $8 \times 35 = 280$. Next, I multiplied 35 by 2 tens: $20 \times 35 = 700$. Then, I added the partial products $280 + 700 = 980$. So, Rachel spent 980 minutes exercising during a 28-day period.

PTS: 1 DIF: average
REF: Lesson 36: Choose a Multiplication Method
OBJ: Choose a method to multiply 2-digit numbers.
NAT: CC.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
TOP: Use place value understanding and properties of operations to perform multi-digit arithmetic.
NOT: Number and Operations in Base Ten