1. Jay and Blair went fishing. Together, they caught 27 fish. Jay caught 2 times as many fish as Blair. How many fish did Jay and Blair each catch? Write an equation and solve. Explain your work.

> Possible explanation: Blair caught *n* fish, and Jay caught 2 × *n* fish. Together they caught 3 × *n* fish, so I wrote the equation 3 × *n* = 27. I solved to find *n* = 9 fish, and 2 × *n* = 18 fish. Blair caught 9 fish and Jay caught 18 fish.

2 points – one point for correct answer and one point for correct explanation

4.OA.3

2. Liam has 3 boxes of baseball cards with 50 cards in each box. He also has 5 boxes with 40 basketball cards in each box. If Liam goes to the store and buys 50 more baseball cards, how many baseball and basketball cards does Liam have? Show your work.

> Liam has 400 baseball and basketball cards.
> Check students' work.

1 point

4.NBT.5

3. Lexi, Susie, and Rial are playing an online word game. Rial scores 100,034 points. Lexi scores 9,348 fewer points than Rial and Susie scores 9,749 more points than Lexi. What is Susie's score? Show your work.

> 100,435; 100,034 − 9,348 = 90,686; 90,686 + 9,749 = 100,435
> Check students' work.

1 point

4.NBT.4

4. There are 2,571 fish in a lake. That is 3 times the number of fish that lived in the lake 5 years ago. How many fish lived in the lake 5 years ago? Write an equation. Then solve.

Possible equation: 3*f* = 2,571 or 2,571 ÷ 3 = *f*; *f* = 857; 857 fish lived in the lake 5 years ago.

1 point

4.OA.2

**5.** For numbers 20a–20b, use place value to find the product.

20a. $3 \times 600 = 3 \times$ [6] hundreds

$=$ [18] hundreds

$=$ [1,800]

20b. $5 \times 400 = 5 \times$ [4] hundreds

$=$ [20] hundreds

$=$ [2,000]

2 points – one point for part a (all three correct responses) and one point for part b (all three correct responses)

4.NBT.4

6. On field day, Danny captured 6 times as many flags as Jon during a game of Capture the Flag. Together, they captured 14 flags. How many flags did each person capture? Complete the bar model. Write an equation and solve.

Danny
n n n n n n

14

Jon
n
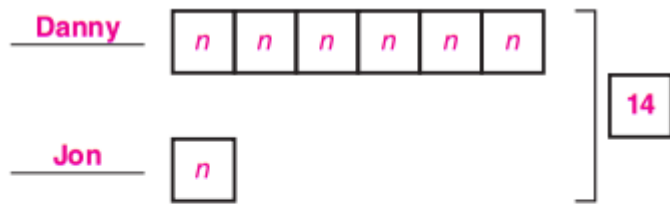
$7 \times n = 14$
$n = 2$
Danny captured 12 flags.
Jon captured 2 flags.

2 points – one point for correct response and one point for correct explanation

4.NF.3b

7. Estimate 15 × 34 by rounding each number to the nearest ten.

600

1 point

4.NBT.3

8. Mr. Rodriguez bought 420 pencils for the school. If there are 10 pencils in a box, how many boxes did he buy?

● 42   Ⓒ 430

Ⓑ 420   Ⓓ 4,200

1 point

4.NBT.1

9. Select a number for ▢ that will make a true comparison. Mark all that apply.

$$703,209 > \blacksquare$$

● 702,309 Ⓒ 703,209 Ⓔ 730,029

● 703,029 Ⓓ 703,290 Ⓕ 730,209

1 point

4.NBT.2

10. A factory can make 2,035 markers in one hour. Which is the **best** estimate of how many markers can be made in 6 hours?

Ⓐ 1,200 markers

Ⓑ 2,000 markers

● 12,000 markers

Ⓓ 20,000 markers

1 point

4.NBT.5

11. The town Sean lives in has 48,968 people. The town Debra lives in has 73,815 people. How many more people live in Debra's town?

● 24,847

Ⓑ 24,947

Ⓒ 25,847

Ⓓ 34,847

1 point

4.NBT.4

12. Daniel plans to use a strategy to find 18 x 470. Which expressions shows a strategy he could use?

    Ⓐ 4 × 5 × 470

    ● 3 × 6 × 470

    Ⓒ 6 × 3 × 47

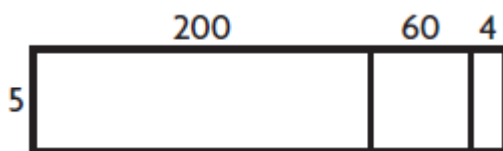   Ⓓ 18 × 0 × 470

<mark>1 point</mark>

4.NBT.5

13. Mia has 2,590 digital phots saved on her computer. Ella has 5 times as many saved on her computer. How many digital photos does Ella have saved on her computer?

    ● 12,950

    Ⓑ 12,550

    Ⓒ 11,550

    Ⓓ 10,950

<mark>1 point</mark>

4.NBT.5

14. Ryan made a model to find the product of a 3-digit number and a 1-digit number.

What multiplication sentence represents Ryan's model?

    ● 5 × 264 = 1,320

    Ⓑ 5 × 260 = 1,300

    Ⓒ 5 × 246 = 1,230

    Ⓓ 5 × 204 = 1,020

<mark>1 point</mark>

4.NBT.5

15. Which shows the **best** estimate to use to find 43 x 28?

Ⓐ $40 \times 20 = 800$

Ⓑ $45 \times 20 = 900$

● $40 \times 30 = 1,200$

Ⓓ $50 \times 30 = 1,500$

1 point
4.NBT.5

16. Sofia can text 40 words in one minute. At that rate, how many words can she text in 12 minutes?

Ⓐ 400

● 480

Ⓒ 580

Ⓓ 720

1 point

4.NBT.5

17. Karen scored 157,834 points on the third level of her computer game. What is the value of the digit 5 in 157,834?

Ⓐ 500,000

● 50,000

Ⓒ 5,000

Ⓓ 500

1 point

4.NBT.1

18. Maria used number tiles to make the number 538,397. Jimmy used number tiles to make the number 583,397. Which statement about these numbers is correct?

Ⓐ $583,397 < 538,397$

● $583,397 > 538,397$

Ⓒ $583,397 = 538,397$

Ⓓ $538,397 > 583,397$

1 point

4.NBT.2