Unit 05 PC Form A

1. 🖎 **Use pencil and paper to answer the question.**
   Circle the number closest to the sum. Write a number model for the estimate.
   $691 + 421$ 500   800   1,100   1,400
   Number model: _____

   ANSWER: 1,100
   　　　　　Number model: $700 + 400 = 1,100$

2. 🖎 **Use pencil and paper to answer the question.**
   Circle the number closest to the sum. Write a number model for the estimate.
   $627 + 884 + 175$ 1,400   1,700   2,000   2,300
   Number model: _____

   ANSWER: 1,700
   　　　　　Number model: $600 + 900 + 200 = 1,700$

3. Use the partial-products algorithm to multiply.

   $9 * 63 =$ _____

   ANSWER: 567

4. Use the partial-products algorithm to multiply.

   _____ $= 234 * 5$

   ANSWER: 1,170
   　　　　　1170

5. Use the partial-products algorithm to multiply.

   _____ $= 90 * 43$

   ANSWER: 3,870
   　　　　　3870

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6. 🖎 **Use pencil and paper to answer the question.**

Use the partial-products algorithm to multiply.

a. $4 * 77 =$ _____

b. $62 * 8 =$ _____

c. $6 * 539 =$ _____

d. $39 * 60 =$ _____

ANSWER:

      a. 308   **b.** 496

      c. 3,234   **d.** 2,340

7. Add.

$8.5 + 4.4 =$ _____

ANSWER: 12.9

8. Add.

$2.12 + 3.25 =$ _____

ANSWER: 5.37

9. Subtract.

$6.3 - 2.1 =$ _____

ANSWER: 4.2

10. Subtract.

$6.77 - 3.11 =$ _____

ANSWER: 3.66

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11. ▭ **Use pencil and paper to answer the question.**
Add or subtract.

a. $7.1 + 4.5 =$ _____ **b.** $4.36 + 2.62 =$ _____

c. $9.7 - 4.3 =$ _____ **d.** $17.78 - 8.43 =$ _____

ANSWER:

a.	11.6		**b.**	6.98
c.	5.4		**d.**	9.35

12. ▭ **Use pencil and paper to answer the question.**
Explain the mistake Nathan made when he solved this problem:

$$\begin{array}{r} 0.56 \\ -\ \ 0.2 \\ \hline 0.54 \end{array}$$

_____

_____

_____

_____

Find the correct answer. _____

ANSWER: Sample answer: Nathan did not line up the digits according to their values; 0.2 is 2
tenths, not 2 hundredths.
Correct answer is 0.36.

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13. ➡ **Use pencil and paper to answer the question.**

Measure the line segment to the nearest $\frac{1}{4}$ inch and 0.5 centimeter.

_____

About _____ inches
About _____ centimeters

ANSWER: Because of differences in printer scaling, the intended measure may be inaccurate. The intended measure for this segment is:

About $3\frac{1}{2}$ inches

About 9 centimeters

Measure the printed segment to the nearest $\frac{1}{4}$ inch and 0.5 centimeter to determine the

correct length based on your local printer settings.

14. ➡ **Use pencil and paper to answer the question.**
Complete the "What's My Rule?" table.

Rule: Multiply by 5

in	out
7	
70	
	400
	4,000
30	

ANSWER:

in	out
7	35
70	350
80	400
800	4,000
30	150

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15. ▭ **Use pencil and paper to answer the question.**
Complete the "What's My Rule?" table.

Rule: $* \ 20$

in	out
3	
50	
	400
	1,600
40	

ANSWER:

in	out
3	60
50	1,000
20	400
80	1,600
40	800

16. ▭ **Use pencil and paper to answer the question.**
Complete the "What's My Rule?" table. State the rule.

Rule: _____

in	out
3	210
9	630
8	
	3,500
	4,200

ANSWER: **Rule:** Multiply by 70

in	out
3	210
9	630
8	560
50	3,500
60	4,200

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17. ✏️ **Use pencil and paper to answer the question.**

Estimate whether the answer will be in tens, hundreds, thousands, or ten thousands. Write a number model to show how you got your estimate. Circle the correct box.

Then calculate the exact answer.

$62 * 57$

10s	100s	1,000s	10,000s

a. Number model: _____

b. Exact answer: _____

ANSWER: The 1,000s box should be circled.
      a. Sample answer: Number model: $60 * 60 = 3,600$
      b. Exact answer: 3,534

18. ✏️ **Use pencil and paper to answer the question.**

Estimate whether the answer will be in tens, hundreds, thousands, or ten thousands. Write a number model to show how you got your estimate. Circle the correct box.

Then calculate the exact answer.

Mr. Rojas fills his bird feeder with 24 ounces of bird seed each day. How many ounces of bird seed will he use in a 3 week time period?

10s	100s	1,000s	10,000s

a. Number model:_____

b. Exact answer: _____ ounces

ANSWER: The 100s box should be circled.
      a. Sample answer: Number model: $20 * 20 = 400$
      b. Exact answer: 504 ounces

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19. ➡ **Use pencil and paper to answer the question.**
On average, the Neighborhood Recycling Center recycles 8,000 aluminum cans each day.
a. About how many aluminum cans are recycled in one week?
_____ aluminum cans
b. About how many aluminum cans are recycled in one month?
_____ aluminum cans
c. Are more or less than a million aluminum cans recycled in a year?
_____

Explain your answer.

_____

_____

_____

_____

ANSWER: **a.** 56,000 aluminum cans;
b. 240,000 aluminum cans;
c. More than a million. Sample answer: Because 240,000 aluminum cans are recycled in one month, about $12 * 240,000 = 2,880,000$ aluminum cans are recycled in a year.

20. ➡ **Use pencil and paper to answer the question.**

Maya measured the line segment shown below. She said, "The line segment is $4\frac{3}{4}$ inches long." Do you think Maya measured correctly? Explain your answer.

_____

_____

_____

_____
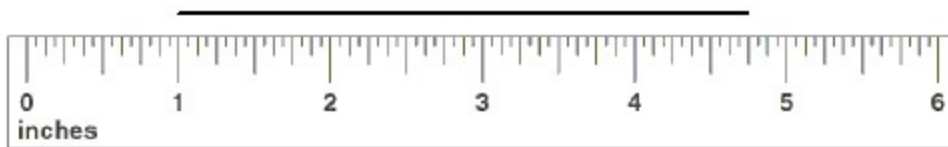
ANSWER: No. Maya started at the 1-inch mark, not the 0 mark, so she should have subtracted 1 in. from her measure to get $3\frac{3}{4}$ in.

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21. 🖊️ **Use pencil and paper to answer the question.**
    Walking Away with a Million Dollars
    You will need the following information to solve the problem below.

You can cover a **sheet** of paper with about 6 $100 bills.

There are 500 sheets in one **ream** of paper.

There are 10 reams in one **carton**.

Imagine that you have inherited one million dollars. The bank has only $500,000 in $100 bills. The bank gives you the rest of the money in $50 bills and $10 bills. Your suitcase will hold as much as 1 carton of paper.

Will one million dollars fit in your suitcase? Show all of your work. Explain what you did to solve the problem.

_____

_____

_____

_____

ANSWER: Sample answer: First I found out how many $100 bills I had. $500,000 is 5,000 $100 bills. Six bills fit on a sheet of paper so 5,000 bills take up the same amount of space as 833 sheets of paper. That's about 2 reams of paper. I have space for 8 more reams. Then I subtracted $500,000 from $1,000,000 to find out the bank still owes me $500,000. If they give me $400,000 in $50, that's another 8,000 bills. So that's 3 reams of paper. I have room for 5 more reams. I still need $100,000. If the bank gives me the rest in $10 bills, that's 10,000 bills. That is less than 4 reams. So $1,000,000 will fit in my suitcase.