Math Released Item 2021 Grade 6

Expanded Form 5064-M25389

Prompt

5064-M25389

A students states that this expanded form can be used to write the number 604.29.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + \left(9 \times \frac{1}{10}\right)$$

Part A

The student's expression is incorrect.

- · Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

Part B

Another student subtracts the number represented by

$$(3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10}) + (1 \times \frac{1}{100})$$
 from
 $(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$ to obtain 604.29.

- Explain whether or not the second student's subtraction is correct.
- · If the student's difference is incorrect, then what is the correct difference?
- Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

Rubric

	5064_M25389 Rubric - Part A									
Score	Description									
	Student response includes each of the following 2 elements:									
	Valid identification of the error or errors in the student's expression									
	 Correctly writes 604.29 in expanded form, 									
	$(6 \times 100) + (4 \times 1) + (2 \times \frac{1}{10}) + (9 \times \frac{1}{100})$ or									
	$(6 \times 100) + (4 \times 1) + (2 \times 0.1) + (9 \times 0.01)$									
2	Sample Student Response:									
	The student does not consider that 604.29 has a 0 in the tens place, and, as a result, multiplies 4, 2, and 9 by a power of ten that is one power too large.									
	The correct way to write 604.29 in expanded form is									
	$(6 \times 100) + (4 \times 1) + (2 \times \frac{1}{10}) + (9 \times \frac{1}{100}).$									
	Or other valid response.									
1	Student response includes 1 of the 2 elements.									
0	Student response is incorrect or irrelevant.									

(Continues on next page)

5064-M25389 Rubric - Part B										
Score	Description									
	Student response includes each of the following 2 elements:									
	 Valid reasoning for why the student's subtraction result is correct 									
	Correct difference, rounded to nearest tenth is 604.3									
	Sample Student Response:									
	The student's result from the subtraction is correct.									
2	The decimal number that corresponds to									
	$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$ is 642.9. The decimal number that									
	corresponds to $(3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10}) + (1 \times \frac{1}{100})$ is 38.61. Subtracting									
	38.61 from 642.9, I get 642.9 - 38.61 = 604.29.									
	604.29 rounded to the nearest tenth is 604.3.									
	Or other valid response.									
1	Student response includes 1 of the 2 elements.									
0	The response is incorrect or irrelevant.									

Anchor Set A1 – A15 With Annotations

Anchor papers are labeled using a capital "A" followed by the sequence number (e.g., A1, A2).

Anchor papers include

- The prompt.
- The student response.
- A score in the top right corner.

The annotation follows the anchor paper, and

- Is aligned to the rubric.
- Contains parts of the student response(s) that, based on the rubric, support the scoring of each element.
- Reflects the original spelling and grammar of student response(s).
 - Example of scoring element within an annotation, with student response language (in parentheses):

The correct fraction to represent the location of point G is given (the fracktion equeals $\frac{2}{\epsilon}$).

• May contain Scoring Decisions or clarifying notes.

The Anchor Set section is followed by a practice set with a scoring matrix. Annotations are not included in the Practice Set section.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

The student put 4 imes 10, 2 imes 1, and $9 imes rac{1}{10}$ in the wrong number place.

$$(6 \times 100) + (4 \times 1) + \left(2 \times \frac{1}{10}\right) + \left(9 \times \frac{1}{100}\right)$$

Part B

Another student subtracts the number represented by $(3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10}) + (1 \times \frac{1}{100})$

to obtain 604.29.

from

• Explain whether or not the second student's subtraction is correct.

- If the student's difference is incorrect, then what is the correct difference?
- · Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

The student is correct because if you subtract 642.9 - 38.61 you would get 604.29. The answer rounded to the nearest tenth would be 604.3.

Anchor Paper 1

Part A: Score Point 2

This response receives full credit. It includes the two required elements:

- The response shows valid identification of the error or errors in the student's expression (The student put 4×10 , 2×1 , and $9 \times \frac{1}{10}$ in the wrong number place).
- The response correctly shows 604.29 in expanded form $((6 \times 100) + (4 \times 1) + (2 \times \frac{1}{10}) + (9 \times \frac{1}{100})).$

Part B: Score Point 2

This response receives full credit. It includes the two required elements:

- The response shows valid reasoning for why the student's subtraction result is correct (if you subtract 642.9 38.61 you would get 604.29).
- The response shows the correct difference, rounded to the nearest tenth, of 604.3. (604.3)

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

The student multiplied 4 by 10 wich he then added with 6 times one hundred which would give you 640 not 604 and then he added 2 which is a whole number and not in the tenths place and he should have multiplied 9 times $\frac{1}{100}$ to get 9 hundredths. $6 \times 100 + 4 \times 1 + 2 \times \frac{1}{10} + 9 \times \frac{1}{100}$

Part B

Another student subtracts the number represented by

$$(3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10}) + (1 \times \frac{1}{100})$$

 $(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$

from

to obtain 604.29.

• Explain whether or not the second student's subtraction is correct.

- If the student's difference is incorrect, then what is the correct difference?
- Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

642.9 - 38.61 = 604.29the student is correct cause the he subtracted correctly.604.3

Anchor Paper 2

Part A: Score Point 2

This response receives full credit. It includes the two required elements:

- The response shows valid identification of the error or errors in the student's expression (The student multiplied 4 by 10 wich he then added with 6 times one hundred which would give you 640 not 604 and then he added 2 which is a whole number and not in the tenths place and he should have multiplied 9 times ¹/₁₀₀ to get 9 hundredths).
- The response correctly shows 604.29 in expanded form $(6 \times 100 + 4 \times 1 + 2 \times \frac{1}{10} + 9 \times \frac{1}{100})$.

Part B: Score Point 2

This response receives full credit. It includes the two required elements:

- The response shows valid reasoning for why the student's subtraction result is correct (642.9 38.61 = 604.29).
- The response shows the correct difference, rounded to the nearest tenth (604.3).

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- · Identify the error or errors in the student's expression.
- · Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

The student was supposed to multiply 4 times 1 and
2 times
$$\frac{1}{10}$$
 and 9 times $\frac{1}{100}$
 $(6 \times 100) + (0 \times 10) + (4 \times 1) + (2 \times \frac{1}{10}) + (9 \times \frac{1}{100})$

Part B

Another student subtracts the number represented by $) + \left(1 \times \frac{1}{100} \right)$ $) + \left(9 \times \frac{1}{10} \right)$

$$(3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10})$$

 $(6 \times 100) + (4 \times 10) + (2 \times 1)$

to obtain 604.29.

from

· Explain whether or not the second student's subtraction is correct.

. If the student's difference is incorrect, then what is the correct difference?

· Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

The students subtraction is correct because 642.9 minus 38.61 is 604.29

604.29 is 604.3 rounded to the nearest tenth

Anchor Paper 3

Part A: Score Point 2

This response receives full credit. It includes the two required elements:

- The response shows valid identification of the error or errors in the student's expression (The student was supposed to multiply 4 times 1 and 2 times ¹/₁₀ and 9 times ¹/₁₀₀).
- The response correctly writes 604.29 in expanded form $((6 \times 100) + (0 \times 10) + (4 \times 1) + (2 \times \frac{1}{10}) + (9 \times \frac{1}{100})).$

Part B: Score Point 2

This response receives full credit. It includes the two required elements:

- The response shows valid reasoning for why the student's subtraction result is correct (The students subtraction is correct because 642.9 minus 38.61 is 604.29).
- The response shows the correct difference, rounded to the nearest tenth (604.3).

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

he need to make 4 x10 into 4x1 and change 2x1 to $2 \times \frac{1}{10}$ and $9 \times \frac{1}{10}$ to $9 \times \frac{1}{100}$ becuase if he didn't then he would get 642.9. (6 × 100) $+ (4 \times 1) + (2 \times \frac{1}{10})$ $+ (9 \times \frac{1}{100}) = 604.29$

Part B

Another student subtracts the number represented by

$$(3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10}) + (1 \times \frac{1}{100})$$

 $(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$

to obtain 604.29.

from

· Explain whether or not the second student's subtraction is correct.

• If the student's difference is incorrect, then what is the correct difference?

• Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

the second student is correct he had no mistakes. rounding it to the nearest tenth is 604.3.

Anchor Paper 4

Part A: Score Point 2

This response receives full credit. It includes the two required elements:

- The response shows valid identification of the error or errors in the student's expression (he needs to make 4×10 into 4×1 and change 2×1 to $2 \times \frac{1}{10}$ and $9 \times \frac{1}{10}$ to $9 \times \frac{1}{100}$).
- The response correctly writes 604.29 in expanded form $((6 \times 100) + (4 \times 1) + (2 \times \frac{1}{10}) + (9 \times \frac{1}{100})).$

Part B: Score Point 1

This response receives partial credit. It includes one of the two required elements:

• The response shows the correct difference, rounded to the nearest tenth (604.3).

The response does not show valid reasoning to indicate why the student's subtraction result is correct.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

The students expression is in correct because what he did was he moved 4, 2, and 9 over one whole place value. His expression should look like this: 600 + 4 + 0.2 + 0.09

 $+ (1 \times \frac{1}{100})$

 $+\left(9\times\frac{1}{10}\right)$

Part B

Another student subtracts the number represented by

$$(3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10})$$

 $(6 \times 100) + (4 \times 10) + (2 \times 1)$

to obtain 604.29.

from

• Explain whether or not the second student's subtraction is correct.

· If the student's difference is incorrect, then what is the correct difference?

• Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

Yes, the students subtraction is correct, because $(3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10}) + (1 \times \frac{1}{100})$ is equal to 38.61. $(6 \times 100) + (4 \times 10)$ $+ (2 \times 1) + (9 \times \frac{1}{10})$ is equal to 642.9. When you subtract 38.61 from 642.9 you get 604.29, so the students subtraction is correct.

Anchor Paper 5 Part A: Score Point 2

This response receives full credit. It includes the two required elements:

- The response shows valid identification of the error or errors in the student's expression (The students expression is in correct because what he did was he moved 4, 2, and 9 over one whole place value).
- The response correctly writes 604.29 in expanded form (600 + 4 + 0.2 + 0.09).

Part B: Score Point 1

This response receives partial credit. It includes one of the two required elements:

• The response shows valid reasoning for why the student's subtraction result is correct $((3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10}) + (1 \times \frac{1}{100})$ is equal to 38.61. $(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$ is equal to 642.9. When you subtract 38.61 from 642.9 you get 604.29).

The response does not show the correct difference, rounded to the nearest tenth, of 604.3.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

Part B

Another student subtracts the number represented by

$$\begin{array}{ll} (3 \times 10) + (8 \times 1) + \ \left(6 \times \frac{1}{10}\right) + \ \left(1 \times \frac{1}{100}\right) & \text{from} \\ (6 \times 100) + (4 \times 10) + (2 \times 1) + \ \left(9 \times \frac{1}{10}\right) & \text{to obta} \end{array}$$

to obtain 604.29.

• Explain whether or not the second student's subtraction is correct.

If the student's difference is incorrect, then what is the correct difference?

Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

642.9 - 38.61 = 604.29

The statement above is correct. The students subtraction was correct. They had the right numbers and subracted the way the were supposed to. 604.29 = 604.3

Anchor Paper 6 Part A: Score Point 1

This response receives partial credit. It includes one of the two required elements:

• The response correctly writes 604.29 in expanded form $((6 \times 100) + (4 \times 1) + (2 \times \frac{1}{10}) + (9 \times \frac{1}{100})).$

The response does not show valid identification of the error or errors in the student's expression (642.9).

Part B: Score Point 2

This response receives full credit. It includes the two required elements:

- The response shows valid reasoning for why the student's subtraction result is correct (642.9 38.61 = 604.29).
- The response shows the correct difference, rounded to the nearest tenth, of 604.3.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- · Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

The student can't do
$$(4 \times 10)$$
. He or she can't do
 (2×1) or $\left(9 \times \frac{1}{10}\right)$.
 $(6 \times 100) + (4 \times 1) + \left(2 \times \frac{1}{10}\right) + \left(9 \times \frac{1}{100}\right)$

Part B

Another student subtracts the number represented by

$$\begin{array}{ll} (3 \times 10) + (8 \times 1) + \ \left(6 \times \frac{1}{10}\right) + \ \left(1 \times \frac{1}{100}\right) & \qquad \text{from} \\ (6 \times 100) + (4 \times 10) + (2 \times 1) + \ \left(9 \times \frac{1}{10}\right) & \qquad \text{to obtain} \end{array}$$

• Explain whether or not the second student's subtraction is correct.

. If the student's difference is incorrect, then what is the correct difference?

• Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.



604.29.

Anchor Paper 7 Part A: Score Point 2

This response receives full credit. It includes the two required elements:

- The response shows valid identification of the error or errors in the student's expression (The student can't do (4×10)). He or she can't do (2×1) or $(9 \times \frac{1}{10})$.
- The response correctly writes 604.29 in expanded form $((6 \times 100) + (4 \times 1) + (2 \times \frac{1}{10}) + (9 \times \frac{1}{100})).$

Part B: Score Point 0

This response receives no credit. It includes none of the required elements:

The response does not show valid reasoning for why the student's subtraction result is correct (No, he or she is not correct because $((3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10}) + (1 \times \frac{1}{100}) = 38\frac{61}{100})$).

The response does not show the correct difference, rounded to the nearest tenth, of 604.3.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

$$\boxed{(6 \times 100) + (4 \times 1) + \left(2 \times \frac{1}{10}\right) + \left(9 \times \frac{1}{100}\right)}$$

Part B

Another student subtracts the number represented by

 $(3 \times 10) + (8 \times 1) + (6)$

 $(6 \times 100) + (4 \times 10) + ($

$$\left(imes rac{1}{10}
ight) + \left(1 imes rac{1}{100}
ight) \ 2 imes 1
ight) + \left(9 imes rac{1}{10}
ight)$$

to obtain 604.29.

from

• Explain whether or not the second student's subtraction is correct.

• If the student's difference is incorrect, then what is the correct difference?

• Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

1. 642.9 - 38.61 = 604.29

The student is correct.

The diffrence rounded to the nearest tenth is 600.00.

Anchor Paper 8

Part A: Score Point 1

This response receives partial credit. It includes one of the two required elements:

• The response correctly writes 604.29 in expanded form $((6 \times 100) + (4 \times 1) + (2 \times \frac{1}{10}) + (9 \times \frac{1}{100})).$

The response does not show valid identification of the error or errors in the student's expression.

Part B: Score Point 1

This response receives partial credit. It includes one of the two required elements:

• The response shows valid reasoning for why the student's subtraction result is correct (642.9 - 38.61 = 604.29).

The response does not show the correct difference, rounded to the nearest tenth (600.00).

$$(6 imes 100) + (4 imes 10) + (2 imes 1) + (9 imes rac{1}{10})$$

Part A

The student's expression is incorrect.

- · Identify the error or errors in the student's expression.
- · Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

The students two mistakes were instead of putting 4 imes 1, which means the number 4, he put 4 imes 10,which is the number 40. that made the number 640.29 instead of 604.29. The other mistake was that instead of putting $2 imes rac{1}{2}$, which means .2, he put 2 imes 1, which means the number 2. So his number was 6042.9, when it should be, 604.29.

Part B

 (3×10)

 (6×100)

Another student subtracts the number represented by $+\left(1 \times \frac{1}{100}\right)$

$$egin{aligned} &+ (8 imes 1) + \left(6 imes rac{1}{10}
ight) + \left(1 imes rac{1}{100}
ight) \ &+ (4 imes 10) + (2 imes 1) + \left(9 imes rac{1}{10}
ight) \end{aligned}$$

from to obtain 604.29.

· Explain whether or not the second student's subtraction is correct.

· If the student's difference is incorrect, then what is the correct difference?

· Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

This students reasoning is correct. This was the number expression, 642.9 - 38.61 = 604.29. The number when it's rounded looks like this, 604.3.

Anchor Paper 9

Part A: Score Point 0

This response receives no credit. It includes none of the required elements.

The response does not show valid identification of the error or errors in the student's expression (The students two mistakes were instead of putting 4×1 , which means the number 4, he put 4×10 , which is the number 40. that made the number 640.29 instead of 604.29. The other mistake was that instead of putting $2 \times \frac{1}{2}$, which means .2, he put 2×1 , which means the number 2. So his number was 6042.9, when it should be, 604.29).

The response does not correctly write 604.29 in expanded form.

Part B: Score Point 2

This response receives full credit. It includes the two required elements:

- The response shows valid reasoning for why the student's subtraction result is correct (642.9 38.61 = 604.29).
- The response shows the correct difference, rounded to the nearest tenth, of 604.3.

A10 Part A: 1; Part B: 0

A students states that this expanded form can be used to write the number 604.29.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + \left(9 \times \frac{1}{10}\right)$$

Part A

The student's expression is incorrect.

- · Identify the error or errors in the student's expression.
- · Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

(6 imes 100) + (4 imes 1) + (2 imes 0.1) + (9 imes 0.01)

Part B

Another student subtracts the number represented by

$$egin{array}{l} (3 imes 10) + (8 imes 1) + \ \left(6 imes rac{1}{10}
ight) + \ \left(1 imes rac{1}{100}
ight) \ (6 imes 100) + (4 imes 10) + (2 imes 1) + \ \left(9 imes rac{1}{10}
ight) \end{array}$$

$$) + (4 \times 10) + (2 \times$$

to obtain 604.29.

from

- · Explain whether or not the second student's subtraction is correct.
- · If the student's difference is incorrect, then what is the correct difference?
- · Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

I got 565.68 .The student was correct

Anchor Paper 10

Part A: Score Point 1

This response receives partial credit. It includes one of the two required elements:

• The response correctly writes 604.29 in expanded form ($(6 \times 100) + (4 \times 1) + (2 \times 0.1) + (9 \times 0.01)$).

The response does not show valid identification of the error or errors in the student's expression.

Part B: Score Point 0

This response receives no credit. It includes none of the required elements.

The response does not show valid reasoning for why the student's subtraction result is correct (The student was correct).

The response does not show the correct difference, rounded to the nearest tenth, of 604.3 (565.68).

A11 Part A: 1; Part B: 0

A students states that this expanded form can be used to write the number 604.29.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- · Identify the error or errors in the student's expression.
- · Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

$$(6 \times 100) + (4 \times 1) + (2 \times 0.1) + (9 \times \frac{1}{100})$$

Part B

Another student subtracts the number represented by

$$\begin{array}{l} (3 \times 10) + (8 \times 1) + \left(6 \times \frac{1}{10}\right) + \left(1 \times \frac{1}{100}\right) \\ (6 \times 100) + (4 \times 10) + (2 \times 1) + \left(9 \times \frac{1}{10}\right) \end{array}$$

to obtain 604.29.

from

$$6 \times 100) + (4 \times 10) + (2 \times 1) + ($$

· Explain whether or not the second student's subtraction is correct.

- If the student's difference is incorrect, then what is the correct difference?
- · Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

it is correct because he multiplied everything correctly between the numbers.

Anchor Paper 11

Part A: Score Point 1

This response receives partial credit. It includes one of the two required elements:

• The response correctly writes 604.29 in expanded form $((6 \times 100) + (4 \times 1) + (2 \times 0.1) + (9 \times \frac{1}{100})).$

The response does not show valid identification of the error or errors in the student's expression.

Part B: Score Point 0

This response receives no credit. It includes none of the required elements.

The response does not show valid reasoning for why the student's subtraction result is correct (it is correct because he multiplied everything correctly between the numbers).

The response does not show the correct difference, rounded to the nearest tenth, of 604.3.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

instead of 4 imes 1 and $2.9 imes rac{1}{10}$ they put 4 imes 10, 2 imes 1, ect. The correct way to write 604.29 is:

$$(6 \times 100) + (4 \times 1) + 2.9 \times \frac{1}{10}$$

Part B

Another student subtracts the number represented by

$$egin{aligned} &(3 imes 10)+(8 imes 1)+\left(6 imes rac{1}{10}
ight)+\left(1 imes rac{1}{100}
ight) & ext{from} \ &(6 imes 100)+(4 imes 10)+(2 imes 1)+\left(9 imes rac{1}{10}
ight) & ext{to obtain 604.29.} \end{aligned}$$

• Explain whether or not the second student's subtraction is correct.

• If the student's difference is incorrect, then what is the correct difference?

· Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

The first student had a total of 642.9 and the second student had a total of 38.61 so 642.9 - 38.61 = 604.29 The students difference was correct.

Anchor Paper 12

Part A: Score Point 0

This response receives no credit. It includes none of the required elements.

The response does not show valid identification of the error or errors in the student's expression (instead of 4 × 1 and 2.9 × $\frac{1}{10}$ they put 4 × 10, 2 × 1, ect).

The response does not correctly write 604.29 in expanded form ($(6 \times 100) + (4 \times 1) + 2.9 \times \frac{1}{10}$)).

Part B: Score Point 1

This response receives partial credit. It includes one of the two required elements:

• The response shows valid reasoning for why the student's subtraction result is correct (642.9 - 38.61 = 604.29).

The response does not show the correct difference, rounded to the nearest tenth, of 604.3.

413 Part A: 0; Part B: 0

A students states that this expanded form can be used to write the number 604.29.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- · Identify the error or errors in the student's expression.
- · Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

600 + 4 + .29 = 604.29

Part B

Another student subtracts the number represented by $(3 imes 10) + (8 imes 1) + \left(6 imes rac{1}{10}
ight) + \left(1 imes rac{1}{100}
ight)$ from $\left(9 \times \frac{1}{10}\right)$ $(6 \times 100) + (4$

$$(2 \times 10) + (2 \times 1) + (2$$

to obtain 604.29.

Explain whether or not the second student's subtraction is correct.

. If the student's difference is incorrect, then what is the correct difference?

· Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

The second student did not get the answer right because if you multpy 3 with 10 you get 30 and then multiply 1 with 8 you get 8 and then add 30 with 8 and you get 38. Now multiplty 6 with $\frac{1}{10}$ and you get $\frac{3}{5}$. If you add 38 with $\frac{3}{5}$ you will get 38 and $\frac{3}{5}$. Now multiply 1 with $\frac{1}{100}$ and you get $\frac{1}{100}$ now add $\frac{1}{100}$ to 38 $\frac{3}{5}$ and you get 45.

Anchor Paper 13

Part A: Score Point 0

This response receives no credit. It includes none of the required elements.

The response does not show valid identification of the error or errors in the student's expression.

The response does not correctly write 604.29 in expanded form (600 + 4 + .29 = 604.29).

Part B: Score Point 0

This response receives no credit. It includes none of the required elements.

The response does not show valid reasoning for why the student's subtraction result is correct (The second student did not get the answer right because if you multpy 3 with 10 you get 30 and then you multiply 1 with 8 you get 8 and then add 30 with 8 and you get 38. Now multiplty 6 with $\frac{1}{10}$ and you get $\frac{3}{5}$. If you add 38 with $\frac{3}{5}$ you will get 38 and $\frac{3}{5}$. Now you multiply 1 with $\frac{1}{100}$ and you get $\frac{1}{100}$ now add $\frac{1}{100}$ to get $38\frac{3}{5}$ and you get 45).

The response does not show the correct difference, rounded to the nearest tenth, of 604.3.

A14 Part A: 0; Part B: 0

A students states that this expanded form can be used to write the number 604.29.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- · Identify the error or errors in the student's expression.
- · Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

600 + 40 + 2 + 91 = 733

Part B

Another student subtracts the number represented by

$$egin{aligned} 3 imes 10 \) + (8 imes 1) + \ \left(6 imes rac{1}{10}
ight) + \ \left(1 imes rac{1}{100}
ight) & ext{from} \\ 6 imes 100 \) + (4 imes 10) + (2 imes 1) + \ \left(9 imes rac{1}{10}
ight) & ext{to obtain the obtain the second second$$

$$(100) + (4 \times 10) + (2 \times 10) + ($$

btain 604.29.

- Explain whether or not the second student's subtraction is correct.
- If the student's difference is incorrect, then what is the correct difference?
- · Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

30 + 8 + 61 + 101 = 200

Anchor Paper 14

Part A: Score Point 0

This response receives no credit. It includes none of the required elements.

The response does not show valid identification of the error or errors in the student's expression.

The response does not correctly write 604.29 in expanded form (600 + 40 + 2 + 91 = 733).

Part B: Score Point 0

This response receives no credit. It includes none of the required elements.

The response does not show valid reasoning for why the student's subtraction result is correct (30 + 8 + 61 + 101 = 200).

The response does not show the correct difference, rounded to the nearest tenth, of 604.3.

A15 Part A: 0; Part B: 0

A students states that this expanded form can be used to write the number 604.29.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

$6 \times 100 + 4 \times 1. + 2 \times 1 + 9 \times \frac{1}{10} = 604.29$ The student was right the only thing that he did wrong was that he need to add a decimal after the four.

Part B

Another student subtracts the number represented by

$$egin{aligned} & (3 imes10)+(8 imes1)+\left(6 imesrac{1}{10}
ight)+\left(1 imesrac{1}{100}
ight)\ & (6 imes100)+(4 imes10)+(2 imes1)+\left(9 imesrac{1}{10}
ight) \end{aligned}$$

to obtain 604.29.

from

- Explain whether or not the second student's subtraction is correct.
- If the student's difference is incorrect, then what is the correct difference?
- · Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

 $3 imes 10+8 imes 1+6 imes rac{1}{10}+1 imes rac{1}{100}$ he was wrong

Anchor Paper 15

Part A: Score Point 0

This response receives no credit. It includes none of the required elements.

The response does not show valid identification of the error or errors in the student's expression (The student was right the only thing that he did wrong was that he need to add a decimal after the 4).

The response does not correctly write 604.29 in expanded form (6 × 100 + 4 × 1. + 2 × 1 + 9 × $\frac{1}{10}$ = 604.29).

Part B: Score Point 0

This response receives no credit. It includes none of the required elements.

The response does not show valid reasoning for why the student's subtraction result is correct (3 × 10 + 8 × 1 + 6 × $\frac{1}{10}$ + 1 × $\frac{1}{100}$, he was wrong).

The response does not show the correct difference, rounded to the nearest tenth, of 604.3.

Practice Set 1 P1-1 - P1-10

Annotations Not Included

P1-1

A students states that this expanded form can be used to write the number 604.29.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

The errors are the 4×10 , 2×1 and $9 \times \frac{1}{10.}$ (6×100) $+ (4 \times 1) + (2 \times \frac{1}{10}) + (9 \times \frac{1}{100})$

Part B

Another student subtracts the number represented by

to obtain 604.29.

from

- Explain whether or not the second student's subtraction is correct.
- If the student's difference is incorrect, then what is the correct difference?
- · Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

Yes the student is correct.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- · Identify the error or errors in the student's expression.
- · Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

$$\begin{array}{l} \text{it is not } 4 \times 10.it \text{ is not } 2 \times 1.is \text{ is } 9 \times \frac{1}{100} \ not \\ 9 \times \frac{1}{10.} \quad (6 \times 100) + (4 \times 1) \\ + \left(2 \times \frac{1}{10}\right) + \left(9 \times \frac{1}{100}\right) \end{array}$$

Part B

Another student subtracts the number represented by

$$egin{aligned} &3 imes 10 \) + (8 imes 1) + \ \left(6 imes rac{1}{10} \
ight) + \ \left(1 imes rac{1}{100} \
ight) & ext{from} \ &6 imes 100 \) + (4 imes 10) + (2 imes 1) + \ \left(9 imes rac{1}{10} \
ight) & ext{to obtain 604.29.} \end{aligned}$$

- Explain whether or not the second student's subtraction is correct.
- . If the student's difference is incorrect, then what is the correct difference?
- · Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

it is correct because, 642.9 - 38.61 = 604.29. 604.29 = 604.3

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- · Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

1. The answer is 624.90. I know this because

$$(6 \times 100 = 600) + (4 \times 10 = 40) + (2 \times 1 = 2) + (9 \times \frac{1}{10}) = 642.9$$
2.

$$(6 \times 100) + (4 \times 1) + (2 \times \frac{1}{10}) + (9 \times \frac{1}{100}) = 604.29$$

Part B

Another student subtracts the number represented by

$$\begin{array}{ll} (3 \times 10) + (8 \times 1) + \left(6 \times \frac{1}{10}\right) + \left(1 \times \frac{1}{100}\right) & \text{from} \\ (6 \times 100) + (4 \times 10) + (2 \times 1) + \left(9 \times \frac{1}{10}\right) & \text{to obtain 604.29.} \end{array}$$

• Explain whether or not the second student's subtraction is correct.

· If the student's difference is incorrect, then what is the correct difference?

Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

1. Yes this students subtraction is correct. I know this because 642.90 - 38.61 = 604.29

2. If you round 604.29 to the nearest tenth you will get 604.30

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

The error in the students expanded form is that they forgot to put in a zero for the tens place. They instead put took what should of been in the ones place (4) and put it in the tense place, which made them put what should of been in the tenths place (2) into the ones place, and what should of been in the hundreths place (9) into the tenths place. The corect way to write 604.29 in expanded form is

$$(6 \times 100) + (4 \times 1) + \left(2 \times \frac{1}{10}\right) + \left(9 \times \frac{1}{100}\right)$$

Part B

Another student subtracts the number represented by

$$\begin{array}{l} (3 \times 10) + (8 \times 1) + \left(6 \times \frac{1}{10}\right) + \left(1 \times \frac{1}{100}\right) \\ (6 \times 100) + (4 \times 10) + (2 \times 1) + \left(9 \times \frac{1}{10}\right) \end{array}$$

to obtain 604.29.

from

- Explain whether or not the second student's subtraction is correct.
- · If the student's difference is incorrect, then what is the correct difference?
- · Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

The students subraction is corect because when you solve and subtract you get 604.29

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

$$\left(6 \times 100\right) + \left(4 \times 1\right) + \left(2 \times \frac{1}{10}\right) + \left(1 \times \frac{1}{10}\right) - \frac{1}{100}$$

Part B

Another student subtracts the number represented by

$$(3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10}) + (1 \times \frac{1}{100})$$
 from
 $(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$ to obtain 604.29.

- Explain whether or not the second student's subtraction is correct.
- If the student's difference is incorrect, then what is the correct difference?
- Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

642.9 is what th first student's equaled, the second student thinks that they should subtract 38.61 off of 642.9. 642.9 -38.61 604.29

So the second student was correct on what he thought they should subtract off.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- · Identify the error or errors in the student's expression.
- · Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

that expanded form equals 640.29 $(6 \times 100) + (4 \times 1) + (.28 + .01)$

Part B

(3

(6

Another student subtracts the number represented by

$$egin{aligned} & imes 10 \) + (8 imes 1) + \ \left(6 imes rac{1}{10}
ight) + \ \left(1 imes rac{1}{100}
ight) \ & imes 100 \) + (4 imes 10) + (2 imes 1) + \ \left(9 imes rac{1}{10}
ight) \end{aligned}$$

$$(10) + (2)$$

$$(0) + (2 \times 1)$$

from to obtain 604.29.

 $\times \frac{1}{10}$

- Explain whether or not the second student's subtraction is correct.
- · If the student's difference is incorrect, then what is the correct difference?
- · Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

yes it is correct, when you add the problems and get the answers then find the diffrence you do get 604.29. when you round it to the nearest tenth you would get 604.3

Part C

Joey wants to make enough fruit salad for 30 servings.

- How should Joey adjust the recipe to find the total amounts of sugar, juice, and fruit needed for 30 servings? Explain your answer.
- What is the total amount of sugar, the total amount of juice, and the total amount of fruit needed for 30 servings? Show your work.

Enter your answers, your explanation, and your work in the space provided. You may use the drawing box to add a drawing to help explain your answer and support your explanations.

Wha	at joe w	ill ha	ve to	o do	is m	nulti	iple	ev	ery	ing	red	ient	by	30.		
Sugar He will need 15 cups Juice He will need $18\frac{3}{4}$																
							=ruit	t he will	l nee	d 40	$\frac{1}{2}$					
oving	Box															_
•																
2																
>																
3																

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- · Identify the error or errors in the student's expression.
- · Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

 $(6 \times 100) + 4 + .29 = 604.29$

Part B

Another student subtracts the number represented by

$$(3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10}) + (1 \times \frac{1}{100})$$

(6 × 100) + (4 × 10) + (2 × 1) + (9 × $\frac{1}{10})$

from to obtain 604.29.

$$(6 \times 100) + (4 \times 10) + (2 \times 10)$$

- Explain whether or not the second student's subtraction is correct.
- If the student's difference is incorrect, then what is the correct difference?
- · Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + \left(9 \times \frac{1}{10}\right) - (4 \times 10) + 4 + (2 \times 1)\left(9 \times \frac{1}{10}\right) + .29$$

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- · Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

$$\left(6 imes 100
ight)+\left(4 imes 1
ight)+\left(2 imes rac{1}{10}
ight)+\left(9 imes rac{1}{100}
ight)$$

Part B

Another student subtracts the number represented by

$$\begin{array}{ll} 3 \times 10 \) + (8 \times 1) + \ \left(6 \times \frac{1}{10} \right) + \ \left(1 \times \frac{1}{100} \right) & \text{from} \\ 6 \times 100 \) + (4 \times 10) + (2 \times 1) + \ \left(9 \times \frac{1}{10} \right) & \text{to obtain 604.29.} \end{array}$$

- Explain whether or not the second student's subtraction is correct.
- If the student's difference is incorrect, then what is the correct difference?
- Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

The answer would be true because 642.9-38.61 would be 604.29

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$$

Part A

The student's expression is incorrect.

- · Identify the error or errors in the student's expression.
- · Correctly write 604.29 in expanded form.

Enter your answers in the space provided.

he or she didnt include the the 0 even if it means nothing it is still apart of the number. and 4 imes 10 is supposed to be 4 imes 1 because it is in the ones place.And since the 2 is after the decimal you should put $2 imes rac{1}{10}$. And since the 2 is in the tenths place the 9 is in the hunderdths place so it would be $9 imes rac{1}{100}$ $(6 \times 100) + (0 \times 10) + (4 \times 1) + (2 \times \frac{1}{10}) + (9 \times \frac{1}{100})$

Part B

Another student subtracts the number represented by

$$(3 \times 10) + (8 \times 1) + (6 \times \frac{1}{10}) + (1 \times \frac{1}{100}) (6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{100})$$

from

 $(6 \times 100) + (4 \times 10) + (2 \times 1) + (9 \times \frac{1}{10})$

to obtain 604.29.

- · If the student's difference is incorrect, then what is the correct difference?
- · Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.

604.3

Practice Set Paper	Score
P1-1	2, 0
P1-2	2, 2
P1-3	1, 1
P1-4	2, 0
P1-5	0, 1
P1-6	0, 1
P1-7	0, 0
P1-8	1, 2
P1-9	1, 1
P1-10	2, 1