

1. The number of movie tickets sold at a theater last year can be written in expanded notation, as shown.

$$(8 \times 100,000) + (6 \times 1,000)$$

What is this number written in standard form?

- A. 860,000
- B. 86,000
- C. 806,000
- D. 8,006,000

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

2. In 2008 the total number of cell phone users in Indonesia was about 140,578,000. Which expression has the same value as 140,578,000.

- A. $100,000,000 + 40,000,000 + 5,000,000 + 700,000 + 80,000$
- B. $100,000,000 + 40,000,000 + 500,000 + 70,000 + 8,000$
- C. $10,000,000 + 4,000,000 + 500,000 + 70,000 + 8,000$
- D. $100,000,000 + 40,000,000 + 500 + 70 + 8$

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

3. People in the United States drink about 129,600,000 bottles of water each day. What is the value of the digit 1 in this number?

- A. 100,000,000
- B. 100
- C. 1,000
- D. 100,000

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

4. A stadium sold 33,300 tickets to a concert. Which statement about this number is true?

- A. The value of the digit in the tens place is 10 times the value of the digit in the hundreds place.
- B. The value of the digit in the thousands place is $\frac{1}{10}$ the value of the digit in the ten thousands place.
- C. The value of the digit in the hundreds place is 10 times the value of the digit in the thousands place.
- D. The value of the digit in the ten thousands place is $\frac{1}{10}$ the value of the digit in the hundreds place.

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

5. In the number shown, one digit is underlined, and one digit is circled.

7(7),000

Which statement about the circled digit is true?

- A. Its value is 10 times greater than the value of the underlined digit.
- B. Its value is $\frac{1}{10}$ the value of the underlined digit.
- C. Its value is 70 times the value of the underlined digit.
- D. Its value is $\frac{1}{70}$ the value of the underlined digit.

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

6. The counter shows the number of times a website has been visited.

000	724	356
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What is the value of the digit 4 in this number?

- A. 400
- B. 40
- C. 4
- D. Not Here

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

4.2.A - 4.2.B - Expanded form and 10 X Relationships

Problem Set: 1

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1. C	2. B	3. A	4. B	5. B	6. D
7. B	8. C	9. C	10. D	11. D	12. D
13. A	14. C	15. D	16. D	17. A	18. B
19. B	20. B	21. C	22. C	23. D	24. A
25. B	26. A	27. C	28. B	29. B	30. A

7. The number of stars in the Phargon Galaxy can be written in expanded notation, as shown.

$$(5 \times 100,000) + (7 \times 100)$$

What is this number written in standard form?

- A. 507,000
- B. 500,700
- C. 570,000
- D. 500,007

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

8. The total number of coins in the treasury of the Queen of Hasmuchia is 170,506,000. Which expression has the same value as 170,506,000?

- A. $100,000,000 + 70,000,000 + 500,000 + 60,000$
- B. $100,000,000 + 70,000,000 + 50,000 + 6,000$
- C. $100,000,000 + 70,000,000 + 500,000 + 6,000$
- D. $100,000,000 + 70,000,000 + 500,000 + 600$

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

9. Particular Patrick does not like germs at all! According to his estimates, he kills 494,300,000 germs a day with his disinfectant spray. What is the value of the digit 3 in this number?

- A. 3,000
- B. 30,000
- C. 300,000
- D. 3,000,000

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

10. Carlotta the Cavity Queen has eaten 88,808 lemon drops in her lifetime. Which statement about this number is true?

- A. The value of the digit in the tens place is 10 times the value of the digit in the hundreds place.
- B. The value of the digit in the hundreds place is 10 times the value of the digit in the thousands place.
- C. The value of the digit in the ten thousands place is $\frac{1}{10}$ the value of the digit in the hundreds place.
- D. The value of the digit in the thousands place is $\frac{1}{10}$ the value of the digit in the ten thousands place.

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

11. In the number shown one digit is underlined, and one digit is circled.

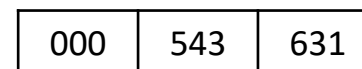
70(7)00

Which statement about the circled digit is true?

- A. Its value is 10 times greater than the value of the underlined digit.
- B. Its value is $\frac{1}{10}$ the value of the underlined digit.
- C. Its value is 100 times the value of the underlined digit.
- D. Its value is $\frac{1}{100}$ the value of the underlined digit.

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

12. The counter shows the number of times a website has been visited.



What is the value of the digit 4 in this number?

- A. 400
- B. 40
- C. 4
- D. Not Here

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

4.2.A - 4.2.B - Expanded form and 10 X Relationships

Problem Set: 2

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1. C	2. B	3. A	4. B	5. B	6. D
7. B	8. C	9. C	10. D	11. D	12. D
13. A	14. C	15. D	16. D	17. A	18. B
19. B	20. B	21. C	22. C	23. D	24. A
25. B	26. A	27. C	28. B	29. B	30. A

13. The number of movie tickets sold at a theater last year can be written in expanded notation, as shown.

$$(7 \times 100,000) + (5 \times 1,000)$$

What is this number written in standard form?

- A. 705,000
- B. 750,000
- C. 700,500
- D. 700,050

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

14. In 2022 the total number of mosquito bites inflicted on campers at Happy Swamp Summer Camp was estimated to be 303,752,000. Which expression has the same value as 303,752,000.

- A. $30,000,000 + 3,000,000 + 700,000 + 50,000 + 2,000$
- B. $300,000,000 + 3,000,000 + 700,000 + 50,000 + 200$
- C. $300,000,000 + 3,000,000 + 700,000 + 50,000 + 2,000$
- D. $300,000,000 + 3,000,000 + 70,000 + 5,000 + 200$

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

15. Despite the mosquitos, Happy Swamp Summer Camp is a popular summer destination. So far, they have served 734,200,910 campers. What is the value of the digit 2 in this number?

- A. 200
- B. 2,000
- C. 20,000
- D. 200,000

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

16. Happy Swamp Summer Camp served up 11,001 bowls of their famous camp oatmeal last July. Which statement about this number is true?

- A. The value of the digit in the thousands place is 100 times the value of the digit in the ones place.
- B. The value of the digit in the thousands place is 10 times the value of the digit in the ten thousands place.
- C. The value of the digit in the ones place is $\frac{1}{100}$ the value of the digit in the thousands place.
- D. The value of the digit in the thousands place is $\frac{1}{10}$ the value of the digit in the ten thousands place.

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

17. In the number shown, one digit is underlined, and one digit is circled.

9, 9090

Which statement about the circled digit is true?

- A. Its value is 10 times greater than the value of the underlined digit.
- B. Its value is $\frac{1}{10}$ the value of the underlined digit.
- C. Its value is 90 times the value of the underlined digit.
- D. Its value is $\frac{1}{90}$ the value of the underlined digit.

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

18. The counter shows the number of times a website has been visited.

000	919	644
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What is the value of the digit 1 in this number?

- A. 1,000
- B. 10,000
- C. 100,000
- D. Not Here

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

4.2.A - 4.2.B - Expanded form and 10 X Relationships

Problem Set: 3

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1. C	2. B	3. A	4. B	5. B	6. D
7. B	8. C	9. C	10. D	11. D	12. D
13. A	14. C	15. D	16. D	17. A	18. B
19. B	20. B	21. C	22. C	23. D	24. A
25. B	26. A	27. C	28. B	29. B	30. A

19. The number of people who watched Muscular Marvin's on-line exercise videos last month can be written in expanded notation as shown.

$$(5 \times 100,000) + (6 \times 10,000)$$

What is this number written in standard form?

- A. 56,000
- B. 560,000
- C. 5,600,000
- D. 506,000

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

20. Muscular Marvin loves to run. He estimates that last year he ran 458,040,000 steps. Which expression has the same value as 458,040,000

- A. $40,000,000 + 5,000,000 + 800,000 + 4,000$
- B. $400,000,000 + 50,000,000 + 8,000,000 + 40,000$
- C. $400,000,000 + 50,000,000 + 8,000,000 + 400,000$
- D. $400,000,000 + 50,000,000 + 8,000,000 + 4,000$

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

21. So far, Muscular Marvin has made \$778,716,443 selling his specially designed exercise equipment.

What is the value of the digit 8 in this number?

- A. 80,000
- B. 800,000
- C. 8,000,000
- D. 80,000,000

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

22. Muscular Marvin has done 55,500 sit ups this year. Which statement about this number is true?

- A. The value of the digit in the hundreds place is 10 times the value of the digit in the thousands place.
- B. The value of the digit in the thousands place is $\frac{1}{10}$ the value of the digit in the hundreds place
- C. The value of the digit in the thousands place is 10 times the value of the digit in the hundreds place.
- D. The value of the digit in the hundreds place is $\frac{1}{10}$ the value of the digit in the ten thousands place.

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

23. In the number shown, one digit is underlined, and one digit is circled.

33,000

Which statement about the circled digit is true?

- A. Its value is $\frac{1}{10}$ the value of the underlined digit.
- B. Its value is 30 times the value of the underlined digit.
- C. Its value is $\frac{1}{30}$ the value of the underlined digit.
- D. Its value is 10 times greater than the value of the underlined digit.

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

24. The counter shows the number of times a website has been visited.

000	878	397
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What is the value of the digit 3 in this number?

- A. 300
- B. 3,000
- C. 30,000
- D. Not Here

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

4.2.A - 4.2.B - Expanded form and 10 X Relationships

Problem Set: 4

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1. C	2. B	3. A	4. B	5. B	6. D
7. B	8. C	9. C	10. D	11. D	12. D
13. A	14. C	15. D	16. D	17. A	18. B
19. B	20. B	21. C	22. C	23. D	24. A
25. B	26. A	27. C	28. B	29. B	30. A

25. The number of jewels that Peg-Leg Pete has captured in his career as a pirate can be written in expanded notation as shown.

$$(4 \times 100,000) + (9 \times 1,000)$$

What is this number written in standard form?

- A. 490,000
- B. 409,000
- C. 49,000
- D. 400,900

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

26. To supplement his work as a pirate, Peg-Leg Pete makes extra money by selling eye patches to his fellow pirates and other customers who love pirate fashion. So far, he has sold 610,220,200 eye patches. Which expression has the same value as 610,220,200?

- A. $600,000,000 + 10,000,000 + 200,000 + 20,000 + 200$
- B. $60,000,000 + 1,000,000 + 20,000 + 2,000 + 20$
- C. $600,000,000 + 1,000,000 + 200,000 + 2,000 + 200$
- D. $600,000,000 + 10,000,000 + 200,000 + 20,000 + 2$

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

27. It seems like being a pirate would be exciting, but in between capturing ships, it can be boring. Peg-leg Pete's pirate crew usually plays video games to pass the time. They estimate they spent 622,677,372 minutes playing video games last year. What is the value of the digit 3 in this number?

- A. 30,000
- B. 3,000
- C. 300
- D. 3

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

28. Peg-Leg Pete and his pirates captured 77,700 pieces of silver from just one ship last week. Which statement about this number is true?

- A. The value of the digit in the hundreds place is 10 times the value of the digit in the thousands place.
- B. The value of the digit in the hundreds place is $\frac{1}{10}$ the value of the digit in the thousands place.
- C. The value of the digit in the hundreds place is $\frac{1}{10}$ the value of the digit in the ten thousands place.
- D. The value of the digit in the thousands place is 100 times the value of the digit in the hundreds place.

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

29. In the number shown, one digit is underlined, and one digit is circled.

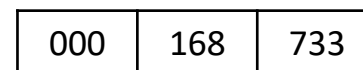
22,000

Which statement about the circled digit is true?

- A. Its value is 10 times greater than the value of the underlined digit.
- B. Its value is $\frac{1}{10}$ the value of the underlined digit.
- C. Its value is 20 times the value of the underlined digit.
- D. Its value is $\frac{1}{200}$ the value of the underlined digit.

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

30. The counter shows the number of times a website has been visited.



What is the value of the digit 6 in this number?

- A. 60,000
- B. 6,000
- C. 600
- D. Not Here

4.2.A - 4.2.B - Expanded form and 10 X Relationships - PS

4.2.A - 4.2.B - Expanded form and 10 X Relationships

Problem Set: 5

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1. C	2. B	3. A	4. B	5. B	6. D
7. B	8. C	9. C	10. D	11. D	12. D
13. A	14. C	15. D	16. D	17. A	18. B
19. B	20. B	21. C	22. C	23. D	24. A
25. B	26. A	27. C	28. B	29. B	30. A

4.2.A - 4.2.B - Expanded form and 10 X Relationships

Problem Set: 5

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1. C	2. B	3. A	4. B	5. B	6. D
7. B	8. C	9. C	10. D	11. D	12. D
13. A	14. C	15. D	16. D	17. A	18. B
19. B	20. B	21. C	22. C	23. D	24. A
25. B	26. A	27. C	28. B	29. B	30. A