

**Question 1**

Complete the sentences, then continue the pattern.

$30 + 1 = \underline{\quad}, \quad 30 + 2 = \underline{\quad}, \quad 30 + 3 = \underline{\quad},$

$30 + 4 = \underline{\quad}, \quad 30 + 5 = \underline{\quad}$

Use a tens and ones mat, base ten blocks or other tens and ones equipment to explain the pattern to a friend.

Question 2

Complete the sentences, then continue the pattern.

$49 - 9 = \underline{\quad}, \quad 48 - 8 = \underline{\quad}, \quad 47 - 7 = \underline{\quad}, \quad 46 - 6 = \underline{\quad}$

Do all your answers have a zero? Use a tens and ones mat, base ten blocks or other tens and ones equipment to explain why.

**Answers****Question 1**

$30 + 1 = \mathbf{31}$

$30 + 2 = \mathbf{32}$

$30 + 3 = \mathbf{33}$

$30 + 4 = \mathbf{34}$

$30 + 5 = \mathbf{35}$

$\mathbf{30 + 6 = 36}$

$\mathbf{30 + 7 = 37}$

$\mathbf{30 + 8 = 38}$

$\mathbf{30 + 9 = 39}$

Question 2

$49 - 9 = \mathbf{40}$

$48 - 8 = \mathbf{40}$

$47 - 7 = \mathbf{40}$

$46 - 6 = \mathbf{40}$

$\mathbf{45 - 5 = 40}$

$\mathbf{44 - 4 = 40}$

$\mathbf{43 - 3 = 40}$

$\mathbf{42 - 2 = 40}$

$\mathbf{41 - 1 = 40}$

**Question 1**

Complete the sentences,
then continue the pattern.

$$40 + \underline{\quad} = 41$$

$$40 + 2 = \underline{\quad}$$

$$40 + \underline{\quad} = 43$$

$$40 + 4 = \underline{\quad}$$

Use a tens and ones mat, base ten blocks or other tens and ones equipment to explain the pattern to a friend.

Question 2

Complete the sentences, then continue the pattern.

$$\underline{\quad} \quad 57 - 7 = \quad 55 - 6 = \quad 56 - 5 = \quad \underline{\quad}$$

Do all your answers have a zero? Use a tens and ones mat, base ten blocks or other tens and ones equipment to explain why.

**Answers****Question 1**

$$40 + 1 = 41$$

$$40 + 2 = 42$$

$$40 + 3 = 43$$

$$40 + 4 = 44$$

$$40 + 5 = 45$$

$$40 + 6 = 46$$

$$40 + 7 = 47$$

$$40 + 8 = 48$$

$$40 + 9 = 49$$

Question 2

$$59 - 9 = 50$$

$$58 - 8 = 50$$

$$57 - 7 = 50$$

$$56 - 6 = 50$$

$$55 - 5 = 50$$

$$54 - 4 = 50$$

$$53 - 3 = 50$$

$$52 - 2 = 50$$

$$51 - 1 = 50$$



Question 1

Complete the sentences, then continue the pattern.

$$30 + 1 = \quad 30 + 2 = \quad 30 + 3 = \quad 30 + 4 = \quad 30 + 5 =$$

Use a tens and ones mat, base ten blocks or other tens and ones equipment to explain the pattern to a friend.

Question 2

If I subtract all the ones from a 2-digit number, I will always have a zero in my answer.

Prove it!

Question 3

Explore the pattern:

$$95 - 5 = \quad 95 - 15 = \quad 95 - 25 =$$

Can you describe what is happening?
Can you make a rule?
Can you make up a pattern of your own?



Answers

Question 1

Complete the sentences, then continue the pattern.

$$20 + 1 = 21$$

$$20 + 2 = 22$$

$$20 + 3 = 23$$

$$20 + 4 = 24$$

$$20 + 5 = 25$$

$$20 + 6 = 26$$

$$20 + 7 = 27$$

$$20 + 8 = 28$$

$$20 + 9 = 29$$

Question 2

True, subtracting all the ones from a 2-digit number will always leave no ones. We represent no ones by using a zero in the ones column. Therefore, any 2-digit number that has subtracted all the ones will have a zero in the ones column.

Question 3

Explore the pattern:

$$95 - 5 = 90$$

$$95 - 15 = 80$$

$$95 - 25 = 70$$

$$95 - 35 = 60$$

$$95 - 45 = 50$$

$$95 - 55 = 40$$

$$95 - 65 = 30$$

$$95 - 75 = 20$$

$$95 - 85 = 10$$

$$95 - 95 = 0$$