Seed Question: Josh decides to try flipping a house. He buys a house for $80,000 and then puts in $50,000 in repairs. This increased the value of the house by 150%. How much profit did he make?

Seed Solution: The cost of the house and repairs came out to 80,000+50,000=130,000. He increased the value of the house by 80,000*1.5=120,000. So the new value of the house is 120,000+80,000=200,000. So he made a profit of 200,000-130,000=70,000 #### ***70000***

Numerical Substitution

Question: Josh decides to try flipping a house. He buys a house for $100,000 and then puts in $60,000 in repairs. This increased the value of the house by 200%. How much profit did he make?

Solution: The value of the house after the repairs is 2 * $100,000 = $200,000. So, the new value of the house is $100,000 + $200,000 = $300,000. Josh's total investment in the house is $100,000 + $60,000 = $160,000. Therefore, his profit is $300,000 - $160,000 = #### ***140,000***.

Digit Expansion

Question: Josh decides to try flipping a house. He buys a house for $800,000 and then puts in $500,000 in repairs. This increased the value of the house by 150%. How much profit did he make?

Solution: The cost of the house and repairs came out to 800,000+500,000=1300,000. He increased the value of the house by 800,000*1.5=1200,000. So the new value of the house is 1200,000+800,000=2000,000. So he made a profit of 2000,000-1300,000=700,000 #### ***700,000***

Integer-decimal-fraction Conversation

Question: Josh decides to try flipping a house. He buys a house for $80,000.00 and then puts in $50,000.00 in repairs. This increased the value of the house by 1.5 times. How much profit did he make?

Solution: The cost of the house and repairs came out to 80,000+50,000=130,000. He increased the value of the house by 80,000*1.5=120,000. So the new value of the house is 120,000+80,000=200,000. So he made a profit of 200,000-130,000=70,000 #### ***70000***

Adding Operation

Question: Josh decides to try flipping a house. He buys a house for $80,000 and then puts in $50,000 in repairs. This increased the value of the house by 150%. After selling the house, he decides to invest his profit in a business venture that promises a 20% return on investment after one year. How much will Josh have at the end of the year from his house flipping profit and the business venture?

Solution: The cost of the house and repairs came out to 80,000+50,000=130,000. He increased the value of the house by 80,000*1.5=120,000. So the new value of the house is 120,000+80,000=200,000. So he made a profit of 200,000-130,000=70,000. The business venture promises a 20% return on investment after one year: $70,000 * 0.2 = $14,000. The total amount he will have at the end of the year: $70,000 + $14,000 = #### ***84,000***.

Reversing Operation

Question: Josh decided to try flipping the house. He bought a house for $80,000 and then spent $50,000 on repairs, which increased the value of the house. If he made $70,000 after the house appreciated, what was the percentage appreciation of the house?

Solution: The cost of the house and repairs came out to 80,000+50,000=130,000. If he made $70,000 after the house appreciated, the value will be 70000+130000 = 200000. Therefore, the value of the house increased by (200000-80000)/80000 = 150%. #### ***150***

Problem Understanding

Question: Josh embarks on a house flipping venture. He purchases a property for $80,000 and invests an additional $50,000 for renovations. This action boosts the house's worth by 150%. What is the amount of profit he earned from this venture?

Solution: The cost of the house and repairs came out to 80,000+50,000=130,000. He increased the value of the house by 80,000*1.5=120,000. So the new value of the house is 120,000+80,000=200,000. So he made a profit of 200,000-130,000=70,000 #### ***70,000***

Distractor Insertion

Question: Josh decides to try flipping a house. He buys a house for $80,000 and then puts in $50,000 in repairs. During the repair process, he also wants to install a $10,000 solar panel system, which doesn't affect the house's value so he gives up. After all the repairs and installations, the value of the house increased by 150%. How much profit did he make, ignoring the cost of the solar panel system?

Solution: The cost of the house and repairs came out to 80,000+50,000=130,000. He increased the value of the house by 80,000*1.5=120,000. So the new value of the house is 120,000+80,000=200,000. So he made a profit of 200,000-130,000=70,000 #### ***70,000***

Critical Thinking

Question: Josh decides to try flipping a house. He buys a house and then puts in $50,000 in repairs. This increased the value of the house by 150%. How much profit did he make?

Solution: We don’t know the initial value of the house. #### ***None***