ANSWER KEY

For #1 – 12, find the percent change and then indicate if it is an increase or decrease. If necessary, round the percent value to the nearest whole number.

1. A change from 10 to 16 is a 60 % (increase)/decrease (circle one)

2. A change from 24 to 18 is a 25 % increase (decrease) (circle one)

3. A change from 132 to 90 is a 32 % increase (decrease) (circle one)

4. A change from 50 to 70 is a 40 % (increase)/decrease (circle one)

5. A change from 16 to 32 is a 100 % (increase)/decrease (circle one)

6. A change from 24 to 9 is a 63 % increase (decrease) (circle one)

7. A change from 34 to 17 is a 50 % increase (decrease) (circle one)

8. A change from 12.4 to 3.1 is a 75 % increase (decrease) (circle one)

9. A change from 0.6 to 0.63 is a 5 % (increase)/decrease (circle one)

10. A change from 38 to 85.5 is a 125 % (increase)/decrease (circle one)

11. A change from 15 to 20 is a 33 % (increase)/decrease (circle one)

12. A change from 8.2 to 1.4 is a 83 % increase (decrease) (circle one)

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ANSWER KEY

For #13 – 18, find the indicated value.

13. If the starting value is 20 and a 35% increase follows, what is the new value? 27

14. If the starting value is 65 and a 60% decrease follows, what is the new value? 26

15. If the starting value is 28 and a 125% increase follows, what is the new value? 63

16. If the starting value is 48 and a 250% decrease follows, what is the new value? –72

17. If the ending value is 92 after a 15% increase, what was the starting value? 80

18. If the ending value is 84 after a 30% decrease, what was the starting value? 120

19. The population of Willowboro is currently 18,340. Due to a large company moving into the area next month, the town council projects that Willowboro's population will increase by 20% in the next 5 years. If this proves to be true, find the population of Willowboro five years from now. 22,008 *people*

20. Michael purchases coffee mugs from his supplier for $5 each to sell in his gift shop. He marks up the price of each mug by 40% to make a profit. What is the selling price of a coffee mug in Michael's shop? $7

21. Natasha's Fudge Emporium is offering a 15% discount off of the regular price of homemade fudge. If a pound of fudge costs $12.75 after the discount, what is the regular price of a pound of fudge? $15

22. During the bird flu, the cost of a dozen eggs was $6.40 per dozen. After the bird flu epidemic was over, the price of eggs finally began to drop, eventually reaching a low price of $2.40 per dozen. Find the percent change in price. 62.5% *decrease*

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