Name:

Convert each percent to a decimal.

1) 95%

2) 61%

3) 844%

4) 87%

5) 230%

6) 503%

7) 51%

8) 395%

9) 49%

10) 11%

11) 39%

12) 739%

13) 970%

14) 256%

15) 277%

16) 37%

17) 4%

18) 773%

19) 14%

20) 219%

1. _____

2. _____

3. _____

4. _____

5. _____

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7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Convert each number to a percentage.

1) 9.22

2) 0.62

3) 4.22

4) 3.07

5) 7.76

6) 5.51

7) 5.6

8) 0.99

9) 5.72

10) 0.36

11) 0.89

12) 0.09

13) 0.7

14) 0.28

15) 0.73

16) 0.26

17) 0.86

18) 0.74

19) 2.38

20) 6.81

1. _____

2. _____

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11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Name:

Solve each problem.

1) What is 150% of 18?

2) What is 100% of 158?

3) What is 10% of 90?

4) What is 200% of 190?

5) What is 200% of 54?

6) What is 25% of 192?

7) What is 10% of 100?

8) What is 125% of 92?

9) What is 150% of 38?

10) What is 10% of 190?

11) What is 125% of 88?

12) What is 50% of 108?

13) What is 100% of 11?

14) What is 150% of 128?

15) What is 25% of 56?

16) What is 200% of 156?

17) What is 50% of 118?

18) What is 25% of 72?

19) What is 125% of 92?

20) What is 100% of 56?

1. _____

2. _____

3. _____

4. _____

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6. _____

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10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Name:

Solve each problem. Round your answer to the nearest hundredth.

Answers

1) What is 6% of 24.77? _____

2) What is 14% of 21.55? _____

3) What is 12% of 37.54? _____

4) What is 2% of 34.4? _____

5) What is 5% of 14.03? _____

6) What is 5% of 37.82? _____

7) What is 10% of 48.46? _____

8) What is 14% of 15.27? _____

9) What is 12% of 23.36? _____

10) What is 6% of 11.46? _____

11) What is 6% of 18.9? _____

12) What is 2% of 33.53? _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Determine which expression is the correct answer.

1) A cell phone company dropped the prices on their phones by 9%. Which expression shows the new price of the phones(p)?

A. p - 0.09p　　　　B. p - 1.09　　　　C. p $\times$ 0.09　　　　D. p - 0.09

2) Over the summer gas prices dropped 3%. Which expression shows the new price of a gallon of gas? (the old price is represented by g)

A. g $\times$ 0.03　　　　B. g - 1.03　　　　C. g - 0.03g　　　　D. g - 0.03

3) While clearing out some old inventory a store offered 10 percent off of any item(i). Which expression can be used to calculate the new cost of an item?

A. i - 1.1　　　　B. i - 0.1i　　　　C. i $\times$ 0.1　　　　D. i - 0.1

4) Joe was earning $11 an hour before his raise. After his 5% raise he was making $11.55 an hour. Which expression shows how his new hourly rate was calculated?

A. 11 $\times$ 1.05　　　　B. 11 $\times$ 0.05　　　　C. 11 + 0.05　　　　D. 11 + 1.05

5) A mall kiosk needed to buy 33 new cell phone cases at z dollars a piece. Because they were buying so many they got 5% off the price. Which expression shows how much money they saved?

A. 33z - 0.05　　　　B. 0.05 $\times$ 33z　　　　C. 33z + 0.05　　　　D. 33z + 1.05

6) Roger drew a square with each side being exactly 12 centimeters long. If he wanted to make the square 6% larger which expression can he use to find the new sides length?

A. 12 + 1.06　　　　B. 12 $\times$ 1.06　　　　C. 12 $\times$ 0.06　　　　D. 12 + 0.06

7) The regular price of a computer was 893 dollars, but over the weekend it'll be on sale for for 10 percent off. Which expression shows the difference in price from normal(n) to sale?

A. n - 10　　　　B. n $\times$ 0.1　　　　C. n - 1.1　　　　D. n - 0.1

8) A house was on sell for $23,474. If you wanted to offer 7% less than the asking price(p) which expression shows how much you should offer?

A. p - 0.07　　　　B. p - 0.07p　　　　C. p - 1.07　　　　D. p $\times$ 0.07

9) A company was having a sale for 19% off the price of computer monitors. Which expression shows how much money you would save if you bought 25 monitors for z dollars a piece?

A. 25z - 0.19　　　　B. 25z + 1.19　　　　C. 0.19 $\times$ 25z　　　　D. 25z + 0.19

10) Last year the price of a college textbook(b) was $197. This year the price will be 13% higher. Which expression shows the difference in price from last year to this year?

A. b $\times$ 0.13　　　　B. b - 1.13　　　　C. b - 0.13　　　　D. b - 13

1-10	90	80	70	60	50	40	30	20	10	0

Name:

Solve each problem. Round your answer to the nearest hundredth.

Answers

1) A small bag of flour weighed 13 ounces. A large bag was 5 percent heavier. How much does the large bag weigh?

2) A loan company charged 35 percent interest on every dollar borrowed. If a person borrowed 177 dollars, how much would they end up paying total?

3) A plant was 46 centimeters tall. After a month it had grown 7% taller. How tall was the plant after a month?

4) Ned created a video that was originally 40 minutes long, but he ended up cutting it by 8 percent. How long was his video after he cut it?

5) An old cell phone battery would last for 13 hours. The new battery lasts 29 percent longer. How long will the new battery last?

6) A furniture store had a chair that cost $33. After a few months the owner took 9% off the price. How much is the chair now?

7) Olivia ordered a shirt online that cost her $38 total. The package arrived late so the seller took 16% off the price. How much did she end up paying?

8) A store was selling lawn mowers for $69. The repair agreement is 23 percent of the price of the mower. How much would it cost for a mower and repair agreement?

9) An older TV screen was 11 centimeters wide. The newer model increased the screen size by 10 percent. How wide is the new TV screen?

10) The early version of a cell phone was 93 millimeters thick. The current version is about 16% thinner. How thick is the newer version?

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

1-10 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0

	Examining Percent Increase and Decrease	Name:

Solve each problem.

1) In February Roger spent 30 hours watching Netflix. In March he only spent 22.8 hours watching. What was the percent decrease in the amount of time he spent watching?

1. _____

2) In February Lana got a puppy that weighed 13 kilograms. By October the puppy weighed 17.16 kilograms. What was the percent the puppy's weight increased?

2. _____

3. _____

3) A small fruit smoothie is 18 ounces while a large fruit smoothie is 21.96 ounces. The large fruit smoothie is _____% larger.

4. _____

5. _____

4) Last month John spent 75.00 dollars on games. This month he only spent $63.00. He spent _____ percent less this month.

6. _____

7. _____

5) A store sold 14.00 dollars worth of gift cards in October. The next month the goal was to sell $15.96 worth of gift cards. This is an increase of _____ percent.

8. _____

9. _____

6) Tiffany used to live 15 kilometers away from the school, but after she moved she now lives 9.9 kilometers away. She is _____ percent closer to the school.

10. _____

7) A library normally collected $42.00 in fees a month. But in March they collected $60.48. What is the percent increase in the number of fees collected in March?

8) A game normally cost $53.00, but Isabel used a coupon and got the game for $37.10. The coupon was for ____ percent off.

9) Normally a chef uses 13 ounces of chocolate to make chocolate chip cookies. But he started using 16.12 ounces instead. He should advertise the cookies as having _____ percent more chocolate.

10) Last years phone model had a battery that lasted 15 hours. This year the battery only last for 7.5 hours. What was the percent the battery life decreased?

1-10	90	80	70	60	50	40	30	20	10	0