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?

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?

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

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

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.

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.

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 year's 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?
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?

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?

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

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10) Last year’s 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?
Solve each problem.

Examining Percent Increase and Decrease

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?

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?

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

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

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.

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.

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) Last month Roger spent 56.00 dollars on games. This month he only spent $43.68. He spent _____ percent less this month.

2) Lana's family decided to get rid of their cable TV. Originally they were paying $101.00 for the TV, internet and phone, but now they're paying $66.66. What was the percent the bill decreased by?

3) In February Frank spent 49 hours watching Netflix. In March he only spent 36.26 hours watching. What was the percent decrease in the amount of time he spent watching?

4) At a restaurant the bill came to $82.00. If you leave $114.80, what percent tip is that?

5) Last year a fishing license cost $58.00. This year the license will cost $33.64. This is a _____ percent decrease.

6) In the spring the average score for a division worksheet was 91. But back in the fall the average score was 70.98. The fall score was _____% lower than the spring score.

7) Victor used to have $441.00 in the bank but after a year the amount increased to $652.68. This was an increase of _____%.

8) Last years phone model had a battery that lasted 13 hours. This year the battery only last for 7.8 hours. What was the percent the battery life decreased?

9) A store normally averaged 102 customers a day. But on the weekends they averaged 51 customers a day. What is the percent decrease in the number of customers?

10) Normally a game costs $33.00. But the new special edition version is going to be $37.62. This is an increase of _____ percent.
Solve each problem.

1) Last month Roger spent $56.00 dollars on games. This month he only spent $43.68. He spent _____ percent less this month.

2) Lana's family decided to get rid of their cable TV. Originally they were paying $101.00 for the TV, internet and phone, but now they're paying $66.66. What was the percent the bill decreased by?

3) In February Frank spent 49 hours watching Netflix. In March he only spent 36.26 hours watching. What was the percent decrease in the amount of time he spent watching?

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10) Normally a game costs $33.00. But the new special edition version is going to be $37.62. This is an increase of _____ percent.
Solve each problem.

1) Roger spent 22 minutes on his math homework and 25.08 minutes on his spelling homework. He spent _____ percent more time on his spelling homework.

2) It used to take Lana 7 minutes to do 20 multiplication problems. Now she can do the same page in 7.7 minutes. She is now _____ percent faster.

3) A library normally collected $54.00 in fees a month. But in March they collected $79.92. What is the percent increase in the number of fees collected in March?

4) A game normally cost $57.00, but Janet used a coupon and got the game for $49.02. The coupon was for ____ percent off.

5) A pole was supposed to be 13 meters long, but it was accidentally made 17.68 meters long. The pole is _____ percent longer than it needs to be.

6) A store sold 14.00 dollars worth of gift cards in October. The next month the goal was to sell $18.20 worth of gift cards. This is an increase of _____ percent.

7) The price for internet on a phone was $7.00 a month, but starting in November the price will be $7.84 a month. This is a _____% increase.

8) Last year a fishing license cost $60.00. This year the license will cost $38.40. This is a ____ percent decrease.

9) In the spring the average score for a division worksheet was 88. But back in the fall the average score was 66.88. The fall score was _____% lower than the spring score.

10) Last years phone model had a battery that lasted 12 hours. This year the battery only last for 8.16 hours. What was the percent the battery life decreased?
Solve each problem.

1) Roger spent 22 minutes on his math homework and 25.08 minutes on his spelling homework. He spent _____ percent more time on his spelling homework.

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10) Last years phone model had a battery that lasted 12 hours. This year the battery only last for 8.16 hours. What was the percent the battery life decreased?
Solve each problem.

1) A large soda is 266 calories and a small soda is 133 calories. The small soda has _____ percent fewer calories.

2) Lana bought a computer for $193.20. Luke bought one for $322.00. Lana's computer was _____ percent cheaper.

3) Frank spent 20 minutes on his math homework and 23.2 minutes on his spelling homework. He spent _____ percent more time on his spelling homework.

4) A store sold 15.00 dollars worth of gift cards in October. The next month the goal was to sell $20.10 worth of gift cards. This is an increase of _____ percent.

5) At a restaurant the bill came to $85.00. If you leave $117.30, what percent tip is that?

6) The price for internet on a phone was $7.00 a month, but starting in November the price will be $10.50 a month. This is a _____% increase.

7) Last month Victor spent 77.00 dollars on games. This month he only spent $67.76. He spent _____ percent less this month.

8) Normally a chef uses 12 ounces of chocolate to make chocolate chip cookies. But he started using 17.28 ounces instead. He should advertise the cookies as having _____ percent more chocolate.

9) Normally a game costs $40.00. But the new special edition version is going to be $45.60. This is an increase of _____ percent.

10) A pole was supposed to be 11 meters long, but it was accidentally made 12.76 meters long. The pole is _____ percent longer than it needs to be.
Solve each problem.

1) A large soda is 266 calories and a small soda is 133 calories. The small soda has ____ percent fewer calories.

2) Lana bought a computer for $193.20. Luke bought one for $322.00. Lana's computer was ____ percent cheaper.

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10) A pole was supposed to be 11 meters long, but it was accidentally made 12.76 meters long. The pole is _____ percent longer than it needs to be.
Solve each problem.

1) Roger spent 21 minutes on his math homework and 29.4 minutes on his spelling homework. He spent _____ percent more time on his spelling homework.

2) A small fruit smoothie is 22 ounces while a large fruit smoothie is 25.96 ounces. The large fruit smoothie is _____% larger.

3) Last year's phone model had a battery that lasted 15 hours. This year the battery only lasts for 10.5 hours. What was the percent the battery life decreased?

4) In February Janet got a puppy that weighed 12 kilograms. By October the puppy weighed 14.88 kilograms. What was the percent the puppy's weight increased?

5) A library normally collected $47.00 in fees a month. But in March they collected $59.22. What is the percent increase in the number of fees collected in March?

6) In the spring the average score for a division worksheet was 98. But back in the fall the average score was 49. The fall score was _____% lower than the spring score.

7) Amy's family decided to get rid of their cable TV. Originally they were paying $98.00 for the TV, internet and phone, but now they're paying $72.52. What was the percent the bill decreased by?

8) Normally a game costs $40.00. But the new special edition version is going to be $51.20. This is an increase of _____ percent.

9) At a restaurant the bill came to $82.00. If you leave $119.72, what percent tip is that?

10) Bianca used to live 12 kilometers away from the school, but after she moved she now lives 10.8 kilometers away. She is _____ percent closer to the school.
Solve each problem.

1) Roger spent 21 minutes on his math homework and 29.4 minutes on his spelling homework. He spent ____ percent more time on his spelling homework.

2) A small fruit smoothie is 22 ounces while a large fruit smoothie is 25.96 ounces. The large fruit smoothie is ____% larger.

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10) Bianca used to live 12 kilometers away from the school, but after she moved she now lives 10.8 kilometers away. She is _____ percent closer to the school.
Solve each problem.

1) In February Roger spent 44 hours watching Netflix. In March he only spent 25.52 hours watching. What was the percent decrease in the amount of time he spent watching?

2) At a restaurant the bill came to $54.00. If you leave $61.56, what percent tip is that?

3) A library normally collected $56.00 in fees a month. But in March they collected $84.00. What is the percent increase in the number of fees collected in March?

4) A pole was supposed to be 14 meters long, but it was accidentally made 21 meters long. The pole is _____ percent longer than it needs to be.

5) The price for internet on a phone was $10.00 a month, but starting in November the price will be $13.20 a month. This is a _____% increase.

6) Last year a fishing license cost $59.00. This year the license will cost $44.84. This is a _____ percent decrease.

7) A store sold 13.00 dollars worth of gift cards in October. The next month the goal was to sell $17.16 worth of gift cards. This is an increase of _____ percent.

8) Isabel's family decided to get rid of their cable TV. Originally they were paying $143.00 for the TV, internet and phone, but now they're paying $125.84. What was the percent the bill decreased by?

9) A store normally averaged 102 customers a day. But on the weekends they averaged 75.48 customers a day. What is the percent decrease in the number of customers?

10) Normally a game costs $33.00. But the new special edition version is going to be $39.60. This is an increase of _____ percent.
Solve each problem.

1) In February Roger spent 44 hours watching Netflix. In March he only spent 25.52 hours watching. What was the percent decrease in the amount of time he spent watching?

2) At a restaurant the bill came to $54.00. If you leave $61.56, what percent tip is that?

3) A library normally collected $56.00 in fees a month. But in March they collected $84.00. What is the percent increase in the number of fees collected in March?

4) A pole was supposed to be 14 meters long, but it was accidentally made 21 meters long. The pole is _____ percent longer than it needs to be.

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10) Normally a game costs $33.00. But the new special edition version is going to be $39.60. This is an increase of _____ percent.
Solve each problem.

1) Last year's phone model had a battery that lasted 12 hours. This year the battery only lasted for 7.44 hours. What was the percent the battery life decreased?

2) Lana used to live 12 kilometers away from the school, but after she moved she now lives 8.88 kilometers away. She is _____ percent closer to the school.

3) A library normally collected $38.00 in fees a month. But in March they collected $51.68. What is the percent increase in the number of fees collected in March?

4) Janet bought a computer for $378.30. John bought one for $485.00. Janet's computer was _____ percent cheaper.

5) Last month Jerry spent 93.00 dollars on games. This month he only spent $68.82. He spent _____ percent less this month.

6) Normally a chef uses 12 ounces of chocolate to make chocolate chip cookies. But he started using 16.56 ounces instead. He should advertise the cookies as having _____ percent more chocolate.

7) A store sold 14.00 dollars worth of gift cards in October. The next month the goal was to sell $17.08 worth of gift cards. This is an increase of _____ percent.

8) It used to take Isabel 8 minutes to do 20 multiplication problems. Now she can do the same page in 8.96 minutes. She is now _____ percent faster.

9) In the spring the average score for a division worksheet was 50. But back in the fall the average score was 38. The fall score was _____% lower than the spring score.

10) A large soda is 216 calories and a small soda is 177.12 calories. The small soda has _____ percent fewer calories.
1) Last year's phone model had a battery that lasted 12 hours. This year the battery only lasted for 7.44 hours. What was the percent the battery life decreased?

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10) A large soda is 216 calories and a small soda is 177.12 calories. The small soda has _____ percent fewer calories.
Solve each problem.

1) In the spring the average score for a division worksheet was 55. But back in the fall the average score was 49.5. The fall score was _____% lower than the spring score.

2) A small fruit smoothie is 24 ounces while a large fruit smoothie is 36 ounces. The large fruit smoothie is _____% larger.

3) A store sold 14.00 dollars worth of gift cards in October. The next month the goal was to sell $18.48 worth of gift cards. This is an increase of _____ percent.

4) Last years phone model had a battery that lasted 15 hours. This year the battery only last for 7.8 hours. What was the percent the battery life decreased?

5) In February Jerry spent 40 hours watching Netflix. In March he only spent 22.4 hours watching. What was the percent decrease in the amount of time he spent watching?

6) Sam spent 30 minutes on his math homework and 40.8 minutes on his spelling homework. He spent _____ percent more time on his spelling homework.

7) The price for internet on a phone was $8.00 a month, but starting in November the price will be $11.04 a month. This is a _____% increase.

8) Isabel bought a computer for $283.50. Will bought one for $315.00. Isabel's computer was _____ percent cheaper.

9) Rachel’s family decided to get rid of their cable TV. Originally they were paying $145.00 for the TV, internet and phone, but now they’re paying $98.60. What was the percent the bill decreased by?

10) A pole was supposed to be 14 meters long, but it was accidentally made 18.48 meters long. The pole is _____ percent longer than it needs to be.
Solve each problem.

1) In the spring the average score for a division worksheet was 55. But back in the fall the average score was 49.5. The fall score was _____% lower than the spring score.

2) A small fruit smoothie is 24 ounces while a large fruit smoothie is 36 ounces. The large fruit smoothie is _____% larger.

3) A store sold $14.00 dollars worth of gift cards in October. The next month the goal was to sell $18.48 worth of gift cards. This is an increase of _____ percent.

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Answers

1. 10
2. 50
3. 32
4. 48
5. 44
6. 36
7. 38
8. 10
9. 32
10. 32
Solve each problem.

Examining Percent Increase and Decrease

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Solve each problem.

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

2) Lana bought a computer for $149.58. Luke bought one for $277.00. Lana's computer was _____ percent cheaper.

3) It used to take Sarah 8 minutes to do 20 multiplication problems. Now she can do the same page in 10.72 minutes. She is now _____ percent faster.

4) At a restaurant the bill came to $87.00. If you leave $109.62, what percent tip is that?

5) Jerry used to have $459.00 in the bank but after a year the amount increased to $596.70. This was an increase of _____%.

6) A library normally collected $54.00 in fees a month. But in March they collected $69.12. What is the percent increase in the number of fees collected in March?

7) The price for internet on a phone was $10.00 a month, but starting in November the price will be $13.20 a month. This is a _____% increase.

8) Will spent 28 minutes on his math homework and 31.36 minutes on his spelling homework. He spent _____ percent more time on his spelling homework.

9) In February Cody spent 48 hours watching Netflix. In March he only spent 31.68 hours watching. What was the percent decrease in the amount of time he spent watching?

10) A large soda is 255 calories and a small soda is 158.1 calories. The small soda has ____ percent fewer calories.
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<tr>
<th>Solve each problem.</th>
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2) A store sold 13.00 dollars worth of gift cards in October. The next month the goal was to sell $18.46 worth of gift cards. This is an increase of _____ percent.

3) Last year a fishing license cost $56.00. This year the license will cost $43.68. This is a _____ percent decrease.

4) John used to have $463.00 in the bank but after a year the amount increased to $509.30. This was an increase of _____%.

5) Last years phone model had a battery that lasted 13 hours. This year the battery only last for 6.5 hours. What was the percent the battery life decreased?

6) A library normally collected $39.00 in fees a month. But in March they collected $54.60. What is the percent increase in the number of fees collected in March?

7) In February Amy got a puppy that weighed 13 kilograms. By October the puppy weighed 15.08 kilograms. What was the percent the puppy’s weight increased?

8) In the spring the average score for a division worksheet was 67. But back in the fall the average score was 56.28. The fall score was _____% lower than the spring score.

9) A pole was supposed to be 13 meters long, but it was accidentally made 17.16 meters long. The pole is _____ percent longer than it needs to be.

10) Last month Oliver spent 54.00 dollars on games. This month he only spent $39.96. He spent _____ percent less this month.
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Answers

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