

Percent Error Worksheet

Ratio and Proportion

Grades 6 to 8

Questions

Name:	
Date:	

1 The difference between the estimated value and the actual value was 21. The actual value is 84. What is the percent error?

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2 The estimated value was 120 and the actual value is 75. What is the percent error?

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3 The estimated value was 432 and the actual value is 450. What is the percent error?

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4 Riley estimated the price of a video game to be \$45, but it was actually \$50.What is the percent error?

Answer

5 David guessed the number of students at his school. He was off by 40 students. The actual number is 500. Calculate the percent error.

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6 Mia thought that 148 people would visit the art fair. There ended up being 185 people at the art fair. Find Mia's percent error.



7 The difference between the estimated value and the actual value was 128. The actual value is 625. What is the percent error?

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8 The estimated value was 984.2 and the actual value is 925. What is the percent error?

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9 The difference between the estimated value was 120 over the actual. The estimated value is 730. What is the percent error? Round to the nearest whole percent.



10 Freddie estimated the weight of a cat to be 10 pounds. When Freddie weighed the cat, the actual weight was 8.5 pounds. What is Freddie's percent error? Round to the nearest hundredth of a percent.

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Davu thinks the cost of a video game is \$65. However, the actual cost is \$58.What is the percent error? Round to the nearest tenth of a percent.

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12 Jasleen estimated the population of her town. She guessed 832 too many people. The actual population is 4,057. What is the percent error? Round to the nearest hundredth of a percent.

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13 An estimated distance from the park to the school is 2.5 miles, but this is 0.3 miles less than the actual value. Find the percent error. Round to the nearest tenth of a percent.

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14 Aisha thinks her car will need 15.5 gallons to fill the tank, but it actually takes2.7 gallons less. Find the percent error in her estimate. Round to the nearest thousandth of a percent.

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Leila predicted her phone bill would be \$75.03, but the actual cost was \$82.Calculate the percent error.

Answer

16 The percent error is 20% over the actual. The actual value was 80. What was the estimated value?

Answer

17 The percent error is 10% under the actual. The estimated value was 350.What was the actual value? Round to the nearest tenth.

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18 Mei guessed the price of a book. Mei guessed \$46. Mei's percent error was 15% over. What is the actual price of the book?

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19 Malik estimated his dog's weight. The actual weight was 135 pounds. Malik's percent error was 30% under. What weight did Malik guess?



20 Ginny estimated the cost of a gaming device for her nephew to be \$250. Her estimate was 8% above the actual value. What is the actual price? Round to nearest cent.

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Answers

Question number	Question	Answers	Standard
1	The difference between the estimated value and the actual value was 21. The actual value is 84. What is the percent error?	25%	7.RP.A.3
2	The estimated value was 120 and the actual value is 75. What is the percent error?	60%	7.RP.A.3
3	The estimated value was 432 and the actual value is 450. What is the percent error?	4%	7.RP.A.3
4	Riley estimated the price of a video game to be \$45, but it was actually \$50. What is the percent error?	10%	7.RP.A.3
5	David guessed the number of students at his school. He was off by 40 students. The actual number is 500. Calculate the percent error.	8%	7.RP.A.3
6	Mia thought that 148 people would visit the art fair. There ended up being 185 people at the art fair. Find Mia's percent error.	20%	7.RP.A.3
7	The difference between the estimated value and the actual value was 128. The actual value is 625. What is the percent error?	20.48%	7.RP.A.3
8	The estimated value was 984.2 and the actual value is 925. What is the percent error?	6.4%	7.RP.A.3

Percent Error Worksheet | Grades 6 to 8 | Answers

Question number	Question	Answers	Standard
9	The difference between the estimated value was 120 over the actual. The estimated value is 730. What is the percent error? Round to the nearest whole percent.	20%	7.RP.A.3
10	Freddie estimated the weight of a cat to be 10 pounds. When Freddie weighed the cat, the actual weight was 8.5 pounds. What is Freddie's percent error? Round to the nearest hundredth of a percent.	17.65%	7.RP.A.3
11	Davu thinks the cost of a video game is \$65. However, the actual cost is \$58. What is the percent error? Round to the nearest tenth of a percent.	12.1%	7.RP.A.3
12	Jasleen estimated the population of her town. She guessed 832 too many people. The actual population is 4,057. What is the percent error? Round to the nearest hundredth of a percent.	20.51%	7.RP.A.3
13	An estimated distance from the park to the school is 2.5 miles, but this is 0.3 miles less than the actual value. Find the percent error. Round to the nearest tenth of a percent.	10.7%	7.RP.A.3
14	Aisha thinks her car will need 15.5 gallons to fill the tank, but it actually takes 2.7 gallons less. Find the percent error in her estimate. Round to the nearest thousandth of a percent.	21.094%	7.RP.A.3

Percent Error Worksheet | Grades 6 to 8 | Answers

Question number	Question	Answers	Standard
15	Leila predicted her phone bill would be \$75.03, but the actual cost was \$82. Calculate the percent error.	8.5%	7.RP.A.3
16	The percent error is 20% over the actual. The actual value was 80. What was the estimated value?	96	7.RP.A.3
17	The percent error is 10% under the actual. The estimated value was 350. What was the actual value? Round to the nearest tenth.	388.9	7.RP.A.3
18	Mei guessed the price of a book. Mei guessed \$46. Mei's percent error was 15% over. What is the actual price of the book?	\$40	7.RP.A.3
19	Malik estimated his dog's weight. The actual weight was 135 pounds. Malik's percent error was 30% under. What weight did Malik guess?	94.5 pounds	7.RP.A.3
20	Ginny estimated the cost of a gaming device for her nephew to be \$250. Her estimate was 8% above the actual value. What is the actual price? Round to nearest cent.	\$231.48	7.RP.A.3

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