

Practice 3-7

Percent of Change

Find each percent of change. Describe the percent of change as an increase or decrease. Round to the nearest whole number.

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|-----------------------------------|--------------------------------------|-------------------------------------|---------------------------------------|
| 1. 36 g to 27 g
<u>↓ 25%</u> | 2. 40 cm to 100 cm
<u>↑ 150%</u> | 3. 90 in. to 45 in.
<u>↓ 50%</u> | 4. 500 lb to 1500 lb
<u>↑ 200%</u> |
| 5. \$100 to \$140
<u>↑ 40%</u> | 6. 100 mi to 175 mi
<u>↑ 75%</u> | 7. 280 m to 320 m
<u>↑ 14%</u> | 8. 58 to 76
<u>↑ 31%</u> |
| 9. 60 to 150
<u>↑ 150%</u> | 10. 600 mi to 480 mi
<u>↓ 20%</u> | 11. 18 to 27
<u>↑ 50%</u> | 12. 290 yd to 261 yd
<u>↓ 10%</u> |

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13. In 1980, Texas had 27 U.S. Representatives. That number increased to 30 in 2000. Find the percent of change.

↑ 11%

14. In 1980, the average annual tuition charge for a four-year public university was \$840. The average annual tuition charge in 2000 was \$3356. What is the percent of change?

↑ 300%

15. In 1990, Atlanta, GA, failed to meet air quality standards on 42 days. In 1999, Atlanta failed to meet air quality standards on 61 days. What is the percent of change?

↑ 45%

Find the greatest possible error and the percent error for each measurement.

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|----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|
| 16. 3 cm
<u>.5 cm ; 16.7%</u> | 17. 0.5 cm
<u>.05 cm ; 10%</u> | 18. 16 in.
<u>.5 in ; 3.1%</u> | 19. 36.85 g
<u>.005 g ; .01%</u> |
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Find the minimum and maximum possible areas for rectangles with the following measurements.

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| 20. 8 cm × 10 cm
<u>$A_{mn} = 71.25 \text{ cm}^2$</u>
<u>$A_{mx} = 89.25 \text{ cm}^2$</u> | 21. 3 in. × 5 in.
<u>$A_{mn} = 11.25 \text{ in}^2$</u>
<u>$A_{mx} = 19.25 \text{ in}^2$</u> | 22. 8 m × 12 m
<u>$A_{mn} = 86.25 \text{ m}^2$</u>
<u>$A_{mx} = 106.25 \text{ m}^2$</u> |
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