Worksheet 9/6/2024

Express the following numbers in three forms: as a simplified fraction, as a decimal, and as a percentage.

1. 30%

2. 3/7

3. 8/5

4. 0.678

Express the first number as a percentage of the second number.

5. Amazon's 2020 revenue was $386 million, compared to Walmart's $524 million.

6. An estimated 1.2 million species of plants and animals on Earth have been identified out of an estimated 8.7 million species that exist.

7. The land area of Russia is 16,376,870 km^2 and that of the entire world is 148,940,000 km^2.

Find both the absolute change and the relative change (as a percentage) in the following cases.

8. The estimated number of refugees in the world increased from 8.7 million in 2005 to 26.0 million in 2020.

9. The number of AM radio stations in the United States decreased from 4978 in 1990 to 4560 in 2020.

Fill in the blanks in the following statements.

10. As of 2020, the life expectancy (at birth) of American women (81.1 years) is _____ percent greater than the life expectancy of men (76.1 years).

11. The area of Norway is 24% more than the area of Colorado, so Norway's area is _____ % of Colorado's area.

12. The population of Hawaii is 52% less than the population of Arkansas, so the population of Hawaii is _____ % of the population of Arkansas.

13. The original retail price of a TV is 20% more than its on-sale price. Therefore, the retail price is _____ times the on-sale price.

Describe each of the following changes in two ways: as an absolute change in terms of percentage points and as a relative change in terms of a percentage.

14. The percentage of people accessing the Internet worldwide increased from 16% in 2005 to 54% in 2020.

15. The percentage of the world's cars manufactured in the United States decreased from 23% in 1999 to 12% in 2019.