Math 7 Period _____   Name_____

7.4 Proportions and Percents End of Unit Review   Date_____

Place of Power

Please **read carefully**. Answer the questions and **reread the problems carefully** to be sure that you have followed the directions. You may use a calculator for this assessment.

Show your work and explain your answers!

1. For each percentage, find a matching statement to describe it. **Show your work!**

    a) 10% of a number

    GG. $y = x$

    b) 25% of a number

    HH. $y = 1.5x$

    c) 50% more than a number

    II. $y = 0.25x$

    d) 25% less than a number

    JJ. $y = 0.1x$

    e) 10% more than number

    KK. $y = 0.75x$

    f) 100% of a number

    LL. $y = 1.1x$

2. Jackson sells 40% more cars than Owen. Owen sells 160 cars. How many cars does Jackson sell? **Show your work!**

3. Leilani made 25 good luck cards this year. Ella made 40% fewer cards than Leilani. How many cards did Ella make? **Show your work!**

4. Solve each problem. Explain or show your reasoning. **Show your work!**

    A. What is 25% of 160?

    C. 13 is 50% of what number?

    B. What is 150% of 32?

    D. 21 is what percentage of 30?

5. Charlie has a recipe for banana bread. Alivia will follow the same recipe. She will make 30% less than Charlie. Which of these equations represents the relationship between a the quantity that Alivia makes and c the quantity that Charlie makes? **Show your work!**

    a) $a = 0.3c$

    b) $a = 0.7c$

    c) $a = 1.3c$

    d) $a = 30c$

6. Diego measured the length of a pen to be 22 cm. The actual length of the pen is 25 cm.

    A. What was the error, expressed in cm? **Show your work!**

    B. What is the percent error for Diego's measurement? **Show your work!**

<u>Sample Answers</u>:
1. a→JJ, b→II, c→HH, d→KK, e→LL, f→GG
2. 224 cars   3. 15 cards
4. A. 40   B. 48   C. 26   D. 70%
5. b
6A. 3cm B. 12%

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