

Name: _____ Period: ____ Due Date: _____

Score: ____ / ____
Percent: _____

INTERMEDIATE 1
UNIT 9

**ASSIGNMENT 9-4
PERCENT CHANGE**

**SYW: NO WORK = NO CREDIT
WORK IN PENCIL ONLY!**

For each problem below, use a model to fill in the chart below.

Situation (context)	Model	Fraction Change	Percent Change	Fraction	Percent
1. Shane started with 32 bugs. Now he has 36 bugs.					
2. Last year 300 students participated in Science Fair. This year 400 students participated.					
3. Lydia used to spend 90 minutes a day on Pinterest. She now spends 60 minutes a day.					
4. During the school year, Wyatt practices football for 15 hours a week. During the summer he practices 30 hours a week.					
5. A pair of running shoes was originally \$75, they are on sale for \$60.					
6. Josh used to have 4 Tech Decks. Now he only has 1.					
7. Jane's house was worth \$120,000 last year. This year it's worth \$150,000.					
8. Airra made \$40 babysitting on Friday. On Saturday she made \$60 babysitting.					

Spiral Review Questions

9. Simplify (write your answer as a fraction) $4 + (3 \div 2 \cdot 5)$

10. Simplify using the distributive property. $-4(3x - 5)$

11. You hear about two great sales on candy bars. Which store has the better deal on candy bars?

STORE A 9 Candy Bars for \$7.50

STORE B 8 Candy Bars for \$6.50

12. Find the difference. Simplify your answer if necessary. $\frac{-7}{6} - \left(\frac{-1}{3}\right)$

x	y
3	18
6	36
7	42
14	84

13. Write an equation to model the relationship shown in the table.

14. You have a bag of 24 marbles: 3 red, 10 yellow, 6 blue, and 5 green. Find the probability if you were to pick out **one marble** from the bag. Find $P(\text{yellow or red})$.

15. The yearbook staff is selling yearbooks in advance so they know how many yearbooks they can order. The equation $y = 30x$ represents the amount of money, y , the yearbook staff receives for x books sold. What does the number 30 tell us?

16. You are trying to see who from VHMS will come to the school play. Which of the following samples would provide a good representative sample?

- A. Ask 50 people at the local grocery store.
- B. Ask 50 people from several randomly selected streets around the school area.
- C. Call random names from the school telephone directory.
- D. Place questionnaires at local stores with a sign asking people to fill them out and drop in a box.

17. Solve $4x + 5 > -11$