Name: **Key**   Date: _____   Period: _____

2.6 Percent Problem Solving DAY ONE CYU

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Solving Percent Equations	1 – 7, 15 - 18	1 – 6, 8 - 10	1 – 6
Circle & Bar Graphs	7 – 10, 15 - 18	7 – 10, 15 - 18	7 – 10, 15 - 18
Solving Discount & Mark-Up	11 - 14	11- 14	11 - 14

Find each number described. Show your work for full credit. Use appropriate units.

1. What number is 16% of 70?

   11.2

2. What number is 88% of 1000?

   880

3. The number 28.6 is what percent of 52?

   55%

4. The number 87.2 is what percent of 436?

   20%

5. The number 45 is 25% of what number?

   180

6. The number 126 is 35% of what number?

   360

The circle graph below shows each continent/region's percent of Earth's land. Use appropriate units. Use this graph for 7 – 10.

Continent/Region Land Area
(percent of Earth's land)

Latin America and the Caribbean 14%
North America 14%
Europe 15%
Africa 20%
Oceania 6%
Antarctica 10%
Asia 21%

7. What percent of land is not included in North America?

   86%

8. What percent of land is in Asia, Antarctica, or Africa?

   51%

9. If Earth's land area is 56.4 million square miles, find the land area of Europe.

   8.46 million m²

10. If Earth's land area is 56.4 million square miles, find the land area of Africa.

    11.28 million mi²

11 – 14: Solve. Show work for full credit. Use appropriate units. If needed, round answers to the nearest cent.

11. Les Mack has used automobiles and recently reduced the price of a used compact car by 8%. If the price of the car before discount was $18,500, find the discount and the new price.

Discount: $1480
new price: $17,020

12. Eastman Cartwright Home store is advertising a 25%-off sale on all new items. Find the discount and the sale price of a new candle that regularly sells for $12.50.
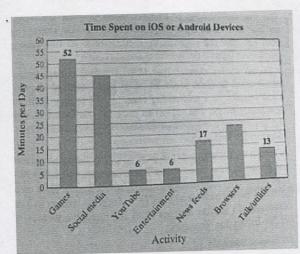
Discount: $3.13
new price: $9.37

13. A birthday celebration meal is $40.50 including tax at Fiesta Cancun. Find the total cost if a 15% tip is added to the given cost.

$46.58

14. A retirement dinner for two at the Madison Steakhouse for two is $65.40 including tax. Find the total cost if a 20% tip is added to the given cost.

$78.48

Time Spent on iOS or Android Devices

The average American spends 162 minutes per day on their phone. The graph shown is a result of phone measurement research on how Americans spend their time daily on their device.

15. Estimate the amount of time the average American spends on social media daily.

45 minutes

16. Estimate the amount of time spent on Internet browsers.

23 minutes

17. What percent of the time the average American spends on connected devices devoted to games? (Round to the nearest tenth of a percent.)

32.1%

18. As newspaper circulation has decreased, more and more people are reading news items online by checking Internet news sites, television station sites, and other news-collecting sites. What percent of the average American's online time is spent following news? (Round to the nearest tenth of a percent.)

10.5%

CYU Reflection: *How far can you go: basic, intermediate, or advanced?*
Rate your mastery level!
How confident are you with the skills this CYU covered? Circle the score you would give yourself.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Basic   Intermediate   Advanced Solved ALL!