

3. Word problems:

- a) Jason and Kevin were swimming laps. The ratio of number of laps completed was 7 : 4. How many laps did Jason swim if he completed 39 more than Kevin?

| | | |
|-------|---|----|
| Jason | 7 | 91 |
| Kevin | 4 | 52 |
| Diff | 3 | 39 |

↘

- b) Kelly had \$360 but she had to pay back her friends. She gave 15% to Jack, 1/5 to Sam, and 0.45 to Bethany. How much did she have left?

15%
20%
45%
80%

^{need}
20% of 360

$10\% = 36 \rightarrow 2(36) = \boxed{\$72 \text{ left}}$

- c) Chris was out to lunch and the bill came to \$64. He wanted to leave a 22% tip. How much should he leave for the bill and tip combined?

10% of \$64 = \$6.40 1% of \$64 = .64
20% of \$64 = \$12.80 2% of \$64 = 1.28

$22\% = 12.80$
 1.28

 \$14.08

\rightarrow

$\$14.08$
 $\$64.00$

 $\$78.08$ Total

- d) Kim made a fruit punch and the ratio of lemonade to ginger ale to strawberry juice was 2:2:1. What percent of the drink was lemonade?

| | | | |
|------------|---|-------------------------|-----|
| Lemonade | 2 | $\times 20 \rightarrow$ | 40 |
| Ginger Ale | 2 | $\times 20 \rightarrow$ | 40 |
| Strawberry | 1 | $\times 20 \rightarrow$ | 20 |
| Total | 5 | | 100 |

↘

$\times 20$

Percent means
out of 100

$\boxed{40\%}$