7.4 Percents (& Interest)

Percent literally means "out of 100."

Ex 1. Convert these to percents.

(a) 0.35

(b) 0.0465

(c) 15.2

(d) $2\frac{3}{5}$

Ex 2. Convert to decimals.

(a) 61%

(b) 7.34%

(c) $2\frac{3}{5}\%$

(d) $\frac{3}{25}$

Three approaches to Percent problems:

	Grid Approach	Proportion	Equation Approach
(1) 30% discount on a $500 item. What is the discount amount?			
(2) 192 people in my town voted. That is 80% of the voting age people. How many people are in the town?			
(3) 78 out of 120 parents voted for the new school district. What percent is this?			

Word Problem Examples

Ex. 3 Old Navy is having a sale on their jeans. They are advertising 30% off. I also have a coupon for an additional 20% off. What is the overall percent discount I'll receive off my jeans?

Ex. 4 Jim bought two shirts that were originally marked at $40 each. One shirt was discounted 20% and t he other was discounted 25%. The sales tax was 4.5%. How much did he spend in all?

Ex 5 Brady received an 8% raise last year. If his salary is now $72,000, what was his salary last year?

Ex. 6 The bookstore manager told me that they take the purchase price of their text books (from the publisher) and divide it by three-fourths in order to determine the price for the students purchasing the book from them. What percent mark-up is this for the student?

Ex. 7 If 70% of the 7th graders in a school wanted to have a school fair and 40% of the 8th graders in that same school wanted to have a school fair, is it possible that only 50% of the students wanted the school fair? Explain. (Note: Assume this school only has 7th and 8th graders.)

Ex. 8 Andrew paid $330 for a new mountain bike to sell in his shop. He wants to price it so that he can offer a 10% discount and still make 20% of the price he paid for it as profit. At what price should the bike be marked?