

Percent problems of the more challenging variety

name: _____

date : _____

color : _____

1) Dan's Dramatic Deals claims to have the best deals in town. Dan purchases a Disco Dancing Doll from the distributor for a certain price. Dan then raises the price he paid 60% and put a price tag on the doll. He then advertised a sale for three dozen percent off. If Debbie Dollover pays \$30.72 for the Disco Dancing Doll, what was the price Dan paid to the distributor?

2a) Peter Brady and Patricia Bentley are very competitive. They both are saving money in their Piggy Banks. Peter has \$90 and Patricia has \$120. Patricia's mom gives her a bonus of 20% of what she already has and Patricia adds it to her Piggy Bank. Peter's dad tells Peter that he will give Peter a bonus so that Peter will have the same total as Patricia. What percent of Peter's money must the bonus from his Dad be?

2a) In the situation above Patricia starts with \$30 more than Peter. Her mom gives her a 20% bonus and Peter's dad gives him a 44% bonus. If they now have the same, how much did they each start with?

3) A \$480 TV was put on sale for 30% off. It didn't sell so the price was lowered an additional percent off the sale price making the new price \$285.60. What was the second percent discount that was given?

4) A square frame was increased from 60 in^2 to 86.4 in^2 . By what percent were the side lengths increased?

5a) Mike put \$20,000 in the bank for two years. His interest was compounded annually. If at the end of two years he has \$22,898 in his account, what percent interest did he earn each year? (**Use a calculator for this one once you set it up.)

5b) What was the interest rate if he had \$23,152.50 after 3 years?

6) Chris's pay went from \$20/hr to \$25/hr after his first evaluation. After his second evaluation his pay was raised to \$33/hr. When comparing the % increases, what percent more than the first raise was the second?