Number

Lesson 22 Assessment

Using Mental Math to Calculate Percents

Calculating Percents using Mental Math			
Explores number patterns and relationships. 100% of 360 = 360 50% of 360 = 180 25% of 360 = 90 12.5% of 360 = 45 What patterns do you see? "I see that the percent is halved each time and when this happens, the product is also halved."	Uses number patterns and relationships to solve problems. 50% of 80 = ? 10% is the same as 0.1 and 50% is the same as 0.5. So, 50% of 80 = 5 × 0.1 × 80 = 5 × 8 = 40	Uses mental math strategies and checks for reasonableness. Find 14% of $300 14% = 10% + 5% – 1% 10% of $300 = $30 5% of $300 = $15 1% of $300 = $3 So, 14% of $300 = $30 + $15 – 3 = $42	Fluently calculates percents using a variety of mental math strategies 8% of 260 = ? 8% of 260 = (10% – 2%) of 260 = 10% of 260 – 2% of 260 = 26 – 2(2.6) = 26 – 5.2 = 20.8
Observations/Documentation			