1.2/1.3 Application Problems

1. Shawna purchased a purse that was 15% off the original price. She also used a $5 off coupon. Her total savings was $12.50, how much was the purse before any discounts?

percent to decimal

$15\% \longrightarrow 0.15$

$0.15x + 5 = 12.50$

2. Tom, a plumber, charges $47.50 per hour plus a service fee of $25. He gave her an estimate that a job would cost no more than $120. How many hours does Tom think the job will take?

inequality

$47.50x + 25 \leq 120$

3. A local bakery makes bread each morning. Each regular loaf of bread should weigh 16 ounces. Any loaves of bread that differ from the recommended weight by more than 4 ounces are used in the café for sandwiches. What is the weight range for loaves of bread used in the café? Graph the solution on a number line.

$|x - 16| \leq 4$

$x - 16 \leq 4$ $x - 16 \geq -4$

$+16 \quad +16$ $+16 \quad +16$

$x \leq 20$ $x \geq 12$

10 12 14 16 18 20 22