

Name _____



Linear Equation Word Problems

1. At Java Jolt Coffee Roastery, the cost to produce each bag of artisan coffee beans is \$8, plus a fixed monthly cost of \$500 for equipment maintenance. If they sell each bag for \$20 and aim for a monthly profit of \$2000, how many bags must they sell?
2. Silverline Construction bids on a project estimating labor costs at \$1000 per week plus \$200 per square foot of construction. If they want to make a profit of \$5000 on a project estimated to be 2000 square feet, what should their bid be?
3. Paws & Claws Pet Supply Store sells bags of premium pet food for \$30 each. They purchase each bag for \$15 and incur a fixed monthly cost of \$5000 for rent and utilities. How many bags must they sell each month to make a monthly profit of \$10,000?
4. Lily drives for RideEasy and earns \$0.60 per mile plus a \$10 hourly wage. If she drives for 8 hours and covers 150 miles, what are her total earnings for the day?
5. GreenThumb Gardening charges \$50 per hour for labor plus a \$20 transportation fee for each service call. If they want to earn \$1000 in a week, and each service call takes 2 hours on average, how many service calls must they make?
6. The WattWise Electrical Company charges a base rate of \$30 per month plus \$0.15 per kilowatt-hour (kWh) of electricity used. If a household's electricity bill for the month is \$75, how many kWh did they consume?
7. FlexFit Manufacturing produces elliptical machines for \$300 each plus a fixed monthly cost of \$10,000 for factory rent. If they sell each machine for \$700, how many machines must they sell in a month to make a profit of \$20,000?
8. Sweet Delights Bakery sells cupcakes for \$3 each. The cost to make each cupcake is \$1.50, and they incur a fixed monthly cost of \$1000 for rent and utilities. How many cupcakes must they sell each month to break even?
9. Shipt Logistics charges \$5 per package plus a fixed monthly fee of \$2000 for warehouse space. If they aim for a monthly profit of \$5000 and ship an average of 500 packages per month, what should they charge per package?
10. AquaFlow Water Utility charges a base fee of \$20 plus \$0.05 per gallon of water used. If a household's water bill for the month is \$50, how many gallons of water did they consume?