

1. You are buying a new car. The annual cost of insurance and gas is \$600. The car itself costs you \$8,000. What is the average yearly cost to own the car if the car will last you x years?

$$f(x) = \frac{600x + 8000}{x}$$

2. The Prom committee finds a new venue. The price for food at this venue is \$12 per person. The venue, along with the DJ, photographer and decorations, will cost \$2,500. How much will each ticket need to cost if x students attend?

$$f(x) = \frac{12x + 2500}{x}$$

3. The Prom committee finds a new venue. The price for food at this venue is \$12 per person. The venue, along with the DJ, photographer and decorations, will cost \$2,500. There will also be 20 chaperones who will be eating at Prom but not paying for a Prom ticket. How much will each ticket need to cost if x people attend, including the chaperones?

$$f(x) = \frac{12x + 2500}{x - 20}$$

$x =$ all people at prom