[a] Lee and Taylor just bought their first house together. They expect to do a \$24,000 remodel 7 years from now. If they deposit \$15,000 into an investment now, what annual growth rate must the investment achieve to cover the cost of the remodel 7 years from now ?

Index in investment interpretation in the mask is an encodiment active to evolve the constraint constraints
$$r = 7$$

 $A = 24,000$ $P = 15,000$ $r = 7$ $t = 7$
 $24,000 = 15,000(1+r)^2 + \frac{24,000}{15,000} = (1+r)^2 + \frac{8}{5} = (1+r)^2 + \frac{3}{10} \frac{8}{5} = 1+r + r = \frac{3}{10} \frac{8}{5} - 1 \approx 0.69449$
Their investment must achieve an annual growth rate of 6.9449%.
[b] When Morgan and Reese got matried in August 2008. Morgan's moder gave them a 55,700 pointing as a wedding present. If the value of the painting increases 8.3% per year, how much will it be worth when Morgan and Reese celebrate their annoversary in August 2004. Their painting will be worth \$20,414.10
Their painting will be worth \$20,414.10.
[c] Chris and Dana plan to start a business 6 years from now. They expect the start-up costs to be \$32,000. How much should they invest now, if their investment is guaranteed to grow 7.6% annually, in order to cover a lavish party, then dish's thother to look at or pays hould invest \$20,619.42.
[d] When be großunde from high school, Bailey charged \$9,000 to his credit card to cover a lavish party, then dish's thother to look at or pays hould invest \$23,000 $P = 7$ $r = 0.076$ $t = 6$
 $32,000 P (1 + 0.076)^6 + P = \frac{32,000}{(1.076)^6} + P \approx 20,619.42$
They should invest \$20,619.42.
[d] When be großunder from high school, Bailey charged \$9,000 to his credit card to cover a lavish party, then dish's tobher to look at or pays hould invest \$23,000 $P = 9,000$ $r = 0.29$ $t = ?$
 $23,000 = 9,000(1 + 0.29)' + \frac{23,000}{9,000} = (1.29)' + \ln \frac{23}{9} = t \ln 1.29 + \frac{\ln \frac{23}{9}}{\ln 1.29} = t + t \approx 3.68$
The looked at his bill 3.68 years later.
[e] When barme and Terry got engaged at the gave of 23. Jamie gave Terry a ring, which grew in value by 5.4% each year. By the time their daughter entered college, the ring had tripted in value. How old were Jamie and Terry when their daughter entered college.