

## Numbers and Operations: Church Pastor

### Grace Bible Church of Boise

**Job Description:** Preach and teach the Bible; care for people's spiritual needs through training and counseling; perform weddings, funerals and other church services; train younger men to become pastors.

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### Problem:

1. In 1995, Grace Bible Church had 400 people attending. Forty of those people left to help start Nampa Bible Church. Two years later, Grace Bible Church had 520 people, and Nampa Bible Church had 200.

a. What is the percentage of growth for Grace Bible Church in the two years 1995 - 1997?

b. What is the percentage of growth for Nampa Bible Church in the two years 1995 - 1997?

c. What is the combined growth for the two churches in the two years 1995 - 1997?

2. If Grace Bible Church wants to build a building large enough for its congregation in the year 2000, how many seats should it have?

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### Solution:

1: The percent of growth

a.  $520 - 400 / 400 = 120/400 = .3 = 30\%$  growth for Grace Bible Church.

b.  $200 - 40/40 = 160/40 = 4.0 = 400\%$  growth for Nampa Bible Church.

c.  $720 - 400/400 = 320/400 = .8 = 80\%$  combined growth

2: Seating anticipated in the year 2000:

Two years growth = 30%

What is 3 years growth 1997-2000?

Estimate 1 year growth =  $30\% / 2 = 15\%$

Three years growth =  $15\% \times 3 = 45\%$

$520 + 520(.45) = 520 + 234 = 754$