

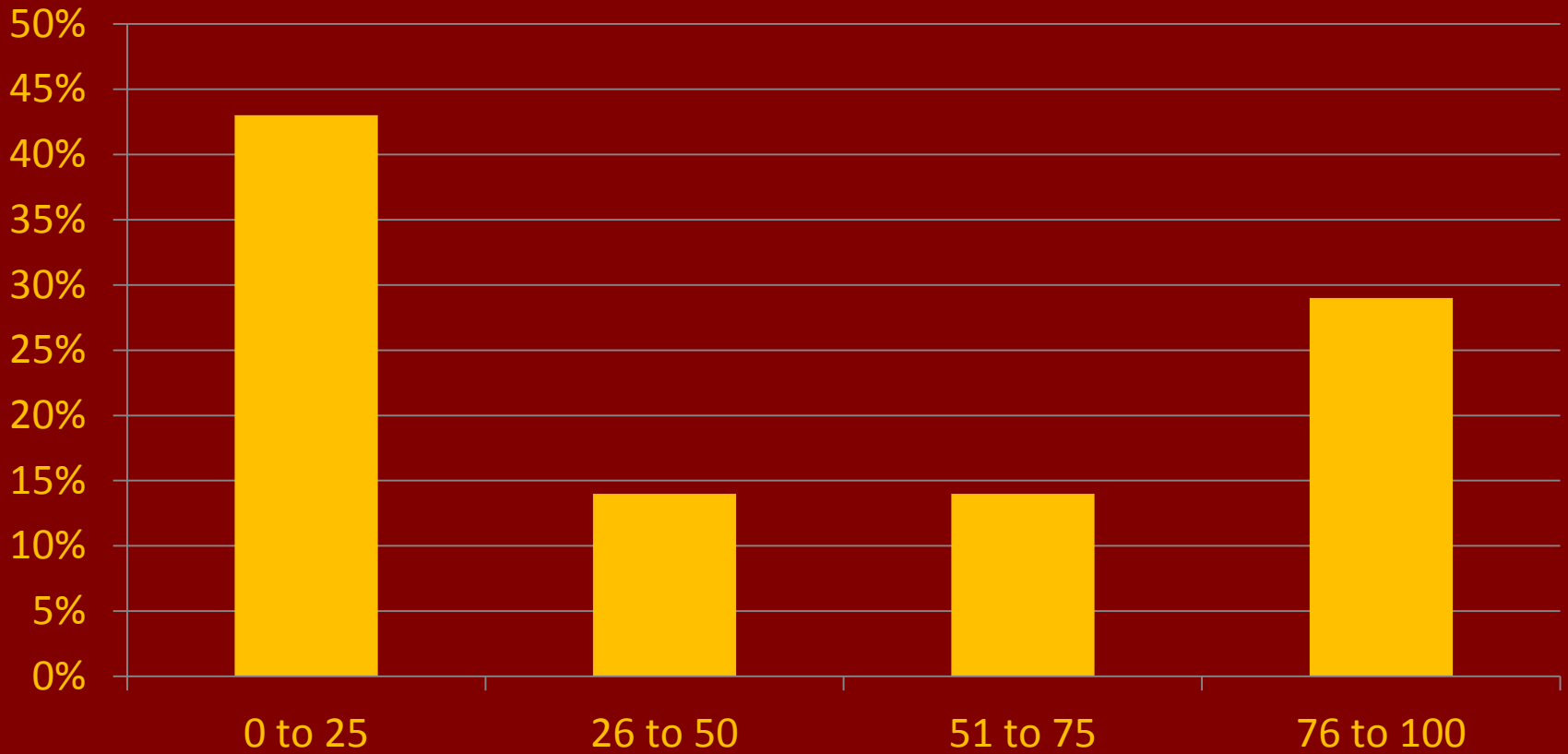
Quiz Question 14

Draw a simple histogram using the following losses (\$1,000's): 55, 25, 65, 85, 25, 25 and 35. Which of the following should be the size of the selected bins?

- A) 0 to 25; 26 to 50; 51 to 75; 76 to 100
- B) 0 to 30; 31 to 60; 61 to 90
- C) 0 to 40; 41 to 80; 81 to 120
- D) 0 to 50; 51 to 100

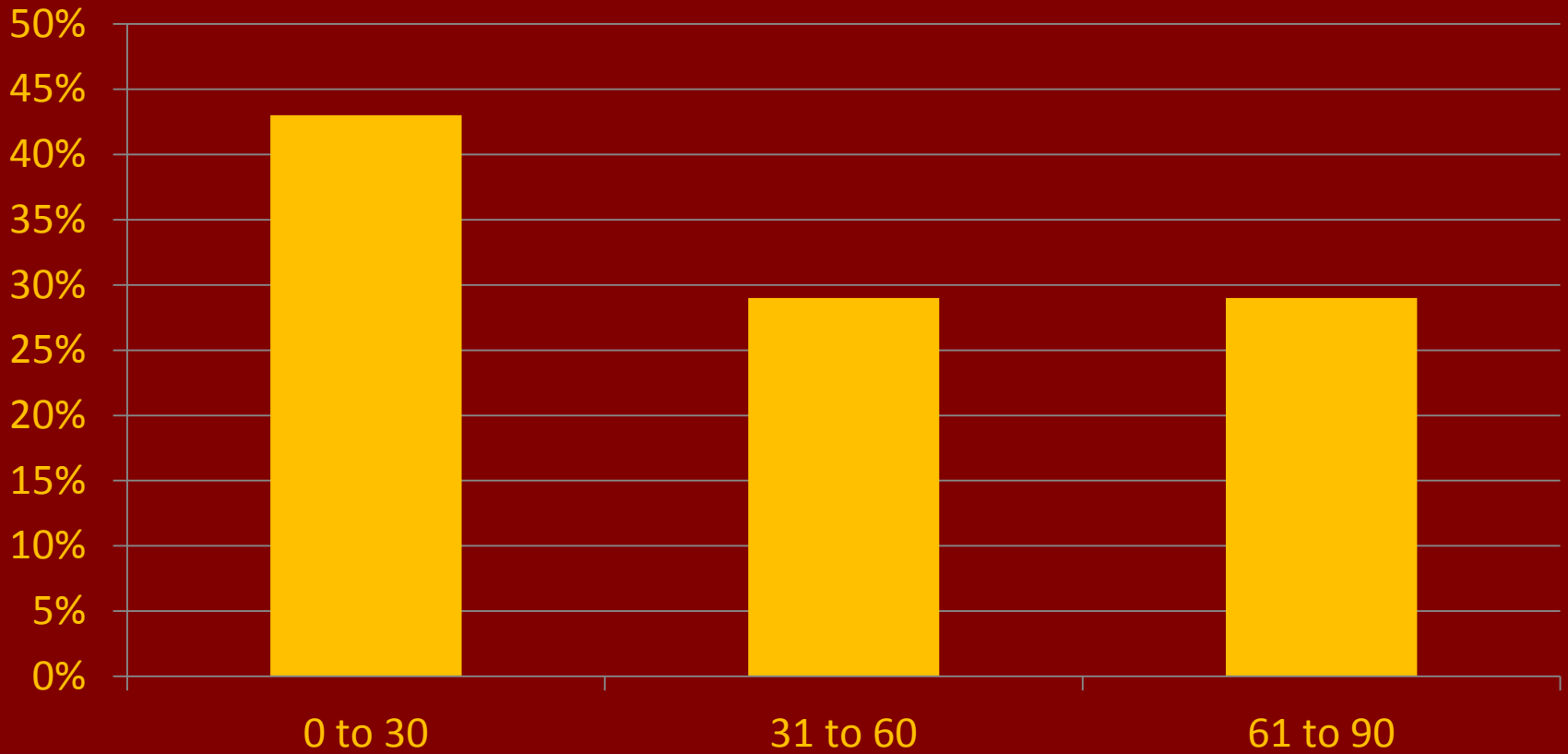
Question 14

Answer A Chart



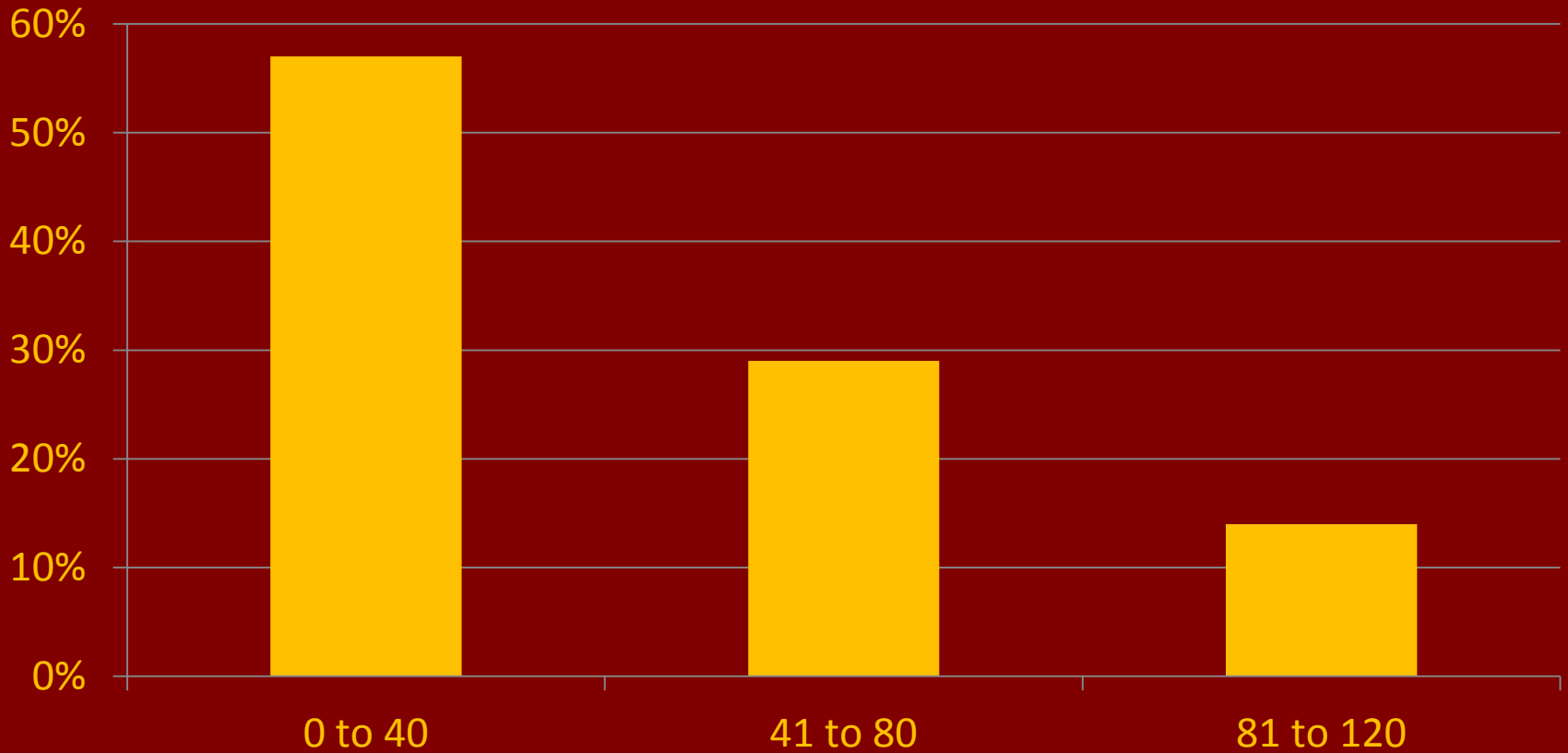
Question 14

Answer B Chart



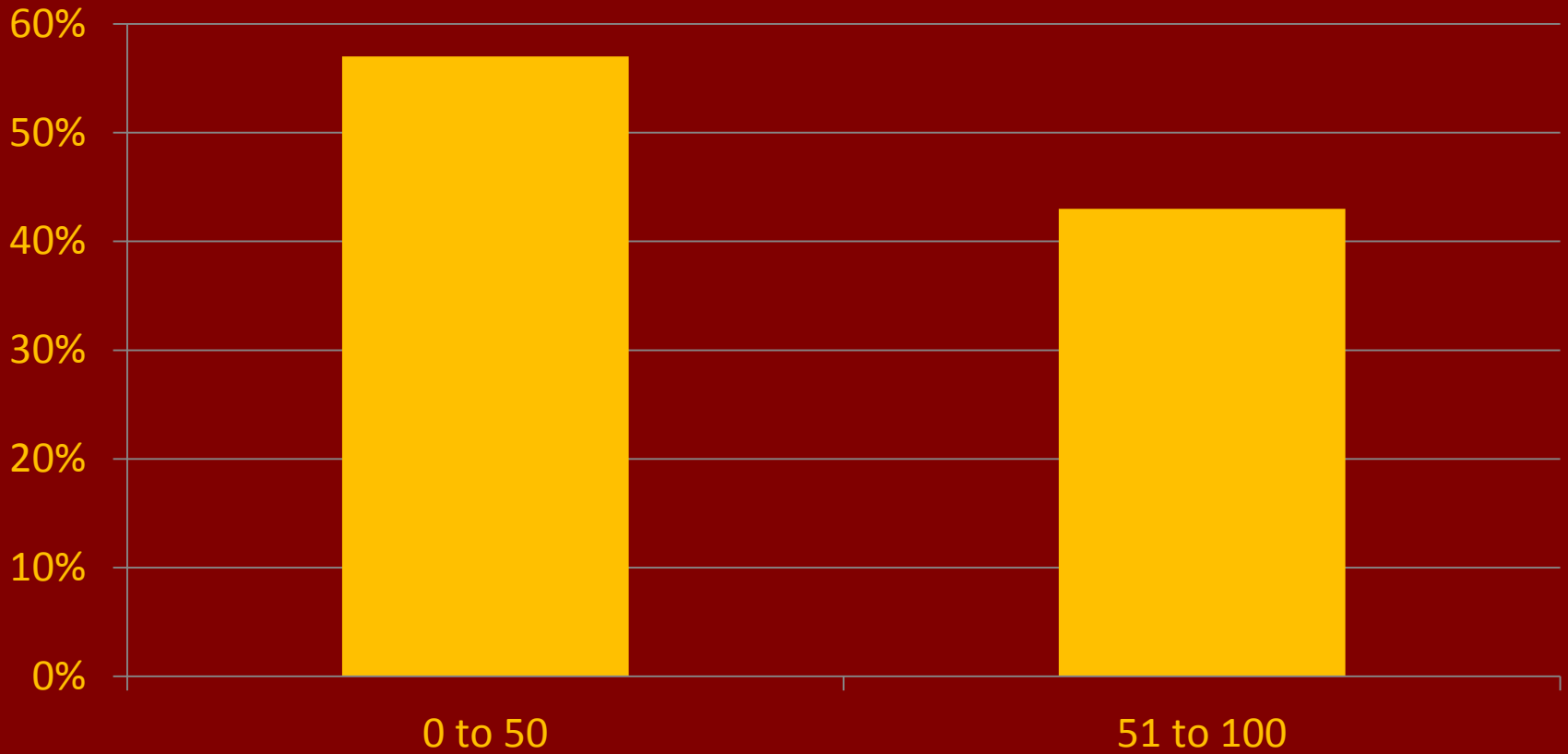
Question 14

Answer C Chart



Question 14

Answer D Chart



Quiz Question 14

Draw a simple histogram using the following losses (\$1,000's): 55, 25, 65, 85, 25, 25 and 35. Which of the following should be the size of the selected bins?

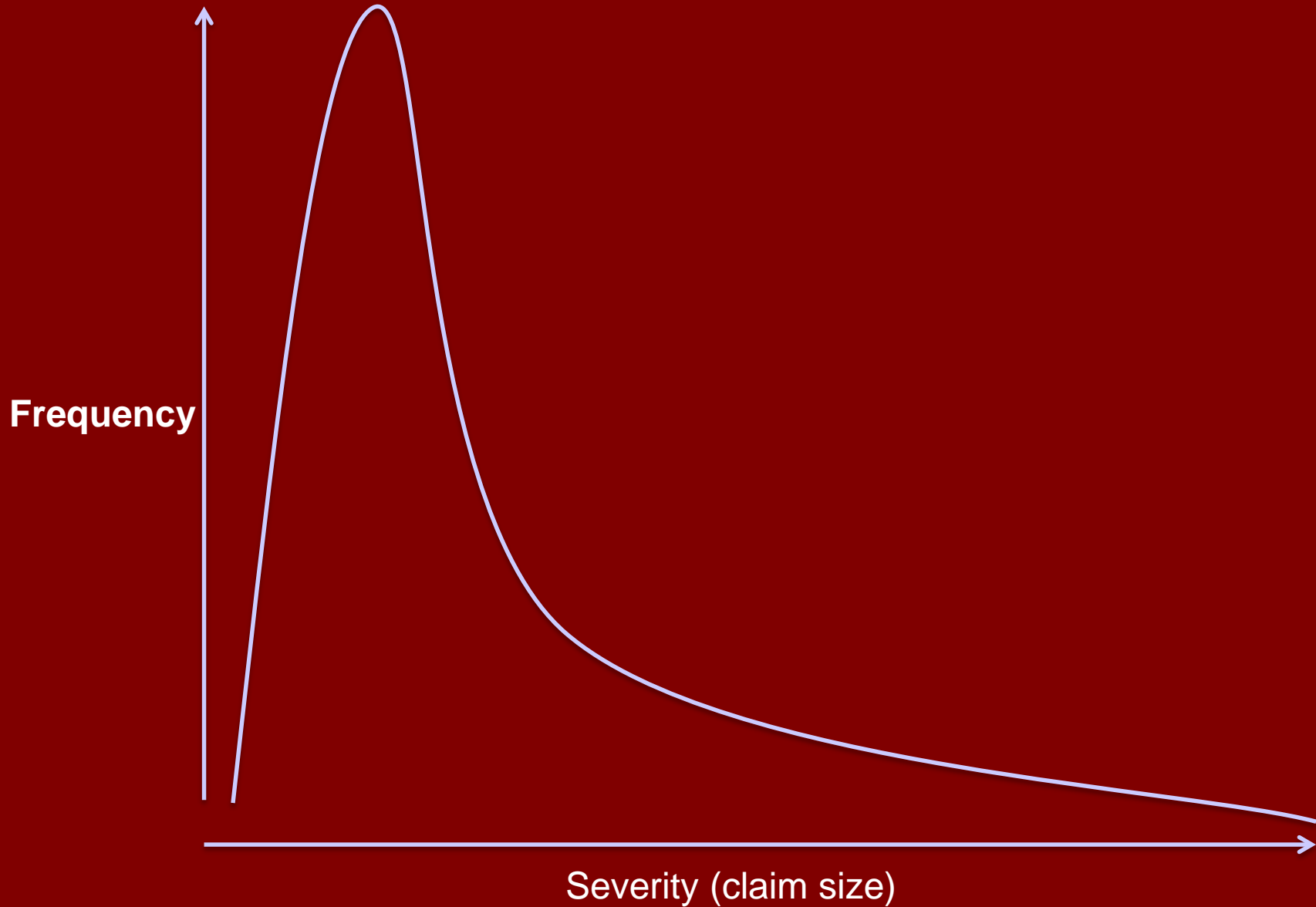
- A) 0 to 25; 26 to 50; 51 to 75; 76 to 100
- B) 0 to 30; 31 to 60; 61 to 90
- C) 0 to 40; 41 to 80; 81 to 120
- D) 0 to 50; 51 to 100

Quiz Question 16

A typical histogram for insurance claim data should be in the shape of which of the following?

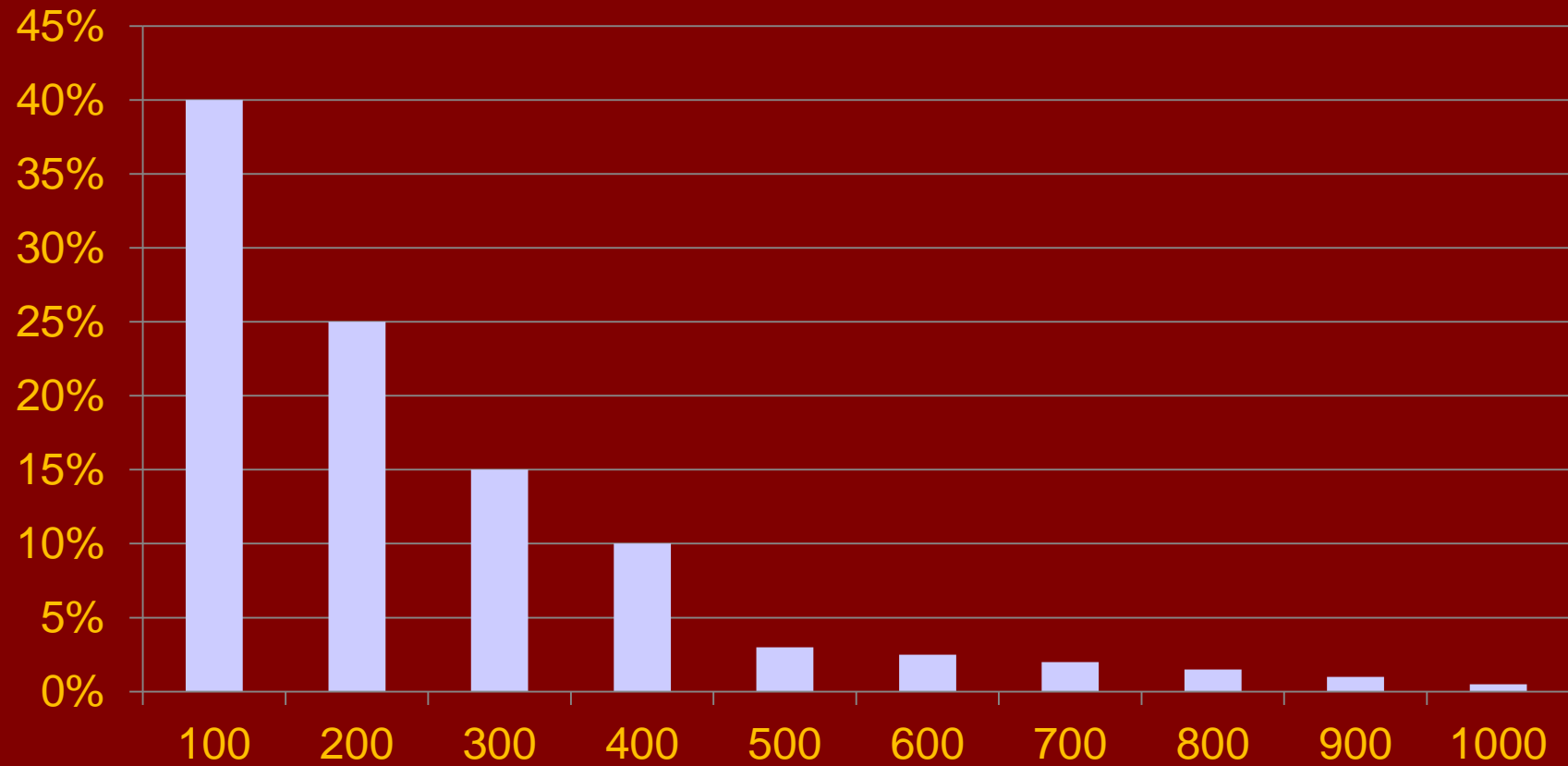
- A) Stair step down to left
- B) Stair step up to left
- C) Stair step down to right
- D) Stair step up to right

Typical Claim Distribution



Quiz Question 16

Stair Step Down to the Right



Claim Development

- Begins on the first day of the policy.
- Ends when all claims are closed.
- Some claims are reported during the policy period.
- Some claims are reported after the policy.
- Like a photograph, the policy needs time to “develop.”
- It may take several years for all claims covered by a given policy to be reported and closed.

Claim Development

- A summary of loss values is generally made at least once a year. The change in these values from year to year is called “Loss Development.”
- Loss Development applies to both the number of claims (Frequency), and the value of the claims (Severity).

Claim Development

- Frequency Development addresses the time lag between the occurrence of claims and when they are actually reported
- "Frequency Loss Development Factors" or multipliers are used to project the ultimate number of claims that will be reported and covered by the policy

End of Section 4

Things to Know:

1. Loss data must be developed
2. Loss data must be adjusted for
 - Exposure changes
 - Inflation
3. Use Mean and Standard Deviation to calculate Confidence Interval
4. Incident Rate (claims per exposure)
5. Loss Rate (loss dollars per exposure)

End of Section 4

Things to Know (continued):

6. Use triangulation to calculate frequency, severity, and paid development factors
7. Use paid development factors to calculate payout timing
8. Organization data is preferred if...
9. Use industry data if not...

Cash Discounting Application

On 5/18/2013 a women in Florida won the \$590 Million Powerball Jackpot. Which after-tax payout option should she choose?

1. Cash Payment of \$278 Million
2. 30 Annual Payments of \$14.8 Million

Cash Discounting Application

Now that you have studied the TVOM principles you are able to determine the Rate of Return on the Powerball Annuity option is 3.34%. Have you changed your mind regarding the Jackpot payout options? Which is the best choice?

1. Cash Payment of \$278 Million
2. 30 Annual Payments of \$14.8 Million

End of Section

Things to Know:

1. How to calculate:
 - Future Value
 - Present Value
2. 5 Project Evaluation Techniques
 - Advantages and disadvantages
3. Problems with IRR

Homework

Skills Application # 12:

- Question #1 - Reference Chapter 4 - Pages 4-12 and 4-14
- Question #2 - Reference Skills Application #5-11 (page 5-37) and example on 5-26

Homework

Skills Application # 13

- Reference Chapter 4, pages 12 and 14 referencing development and indexing of losses

Skills Application # 14

- Reference Skills Application # 11 (Chapter 5, answer in Appendix, Review Problems - page 2)

Week 3 Discussion Question(s)

We studied 5 Evaluation Techniques this week (Section 5 pages 21-22).

Which one are you most likely to use? Why?

Which one are you least likely to use? Why?