Generate three examples of Type I and Type II Errors. For each example complete the following:

I've provided an example for clarification for each part of the problem.

1. Identify context
   Context: Is there a fire in the building

2. Identify what would null hypothesis would be
   Null hypothesis: there is no fire

3. Identify what it would mean to reject the null
   Reject the null: I reject there is no fire, therefore I’m claiming that “There is a fire…. “Fire! Fire!”

4. Identify what it would mean to not reject the null
   Do not reject the null: I do not reject there is no fire, therefore I’m claiming that “There is no fire…. “no fire”

5. Describe what it would mean to reject the null hypothesis correctly (correct decision) – be sure to complete both parts (claim, and whether true)
   Correct decision - Reject the null:
   I reject there is no fire, therefore I’m claiming that “There is a fire” and I am correct, there really is a fire”

6. Describe what it would mean to reject the null hypothesis incorrectly (Type I error) – be sure to complete both parts (claim, and whether true)
   Type I Error (False Alarm) - Reject the null:
   I reject there is no fire, therefore I’m claiming that “There is a fire” but I not correct, there really is no fire”

7. Describe what it would mean to not reject the null hypothesis correctly (correct decision) – be sure to complete both parts (claim, and whether true)
   Correct decision – Do not reject the null:
   I do not reject there is no fire, therefore I’m claiming that “There is no fire” and I am correct, there really is no fire”

8. Describe what it would mean to not reject the null hypothesis incorrectly (Type II error) – be sure to complete both parts (claim, and whether true)
   Type II Error (Miss) - Do not reject the null:
   I do not reject there is no fire, therefore I’m claiming that “There is no fire” but I not correct, there really is a fire”

Your first example:
1. Identify context

2. Identify what would null hypothesis would be

3. Identify what it would mean to reject the null

4. Identify what it would mean to not reject the null

5. Describe what it would mean to reject the null hypothesis correctly (correct decision) – be sure to complete both parts (claim, and whether true)

6. Describe what it would mean to reject the null hypothesis incorrectly (Type I error) – be sure to complete both parts (claim, and whether true)

7. Describe what it would mean to not reject the null hypothesis correctly (correct decision) – be sure to complete both parts (claim, and whether true)

8. Describe what it would mean to not reject the null hypothesis incorrectly (Type II error) – be sure to complete both parts (claim, and whether true)
Your second example:
1. Identify context

2. Identify what would null hypothesis would be

3. Identify what it would mean to reject the null

4. Identify what it would mean to not reject the null

5. Describe what it would mean to reject the null hypothesis correctly (correct decision)
   – be sure to complete both parts (claim, and whether true)

6. Describe what it would mean to reject the null hypothesis incorrectly (Type I error)
   – be sure to complete both parts (claim, and whether true)

7. Describe what it would mean to not reject the null hypothesis correctly (correct decision)
   – be sure to complete both parts (claim, and whether true)

8. Describe what it would mean to not reject the null hypothesis incorrectly (Type II error)
   – be sure to complete both parts (claim, and whether true)

Your third example:
1. Identify context

2. Identify what would null hypothesis would be

3. Identify what it would mean to reject the null

4. Identify what it would mean to not reject the null

5. Describe what it would mean to reject the null hypothesis correctly (correct decision)
   – be sure to complete both parts (claim, and whether true)

6. Describe what it would mean to reject the null hypothesis incorrectly (Type I error)
   – be sure to complete both parts (claim, and whether true)

7. Describe what it would mean to not reject the null hypothesis correctly (correct decision)
   – be sure to complete both parts (claim, and whether true)

8. Describe what it would mean to not reject the null hypothesis incorrectly (Type II error)
   – be sure to complete both parts (claim, and whether true)