Part 5.2 Questions

Fill in the blanks below. With each question the blanks get slightly bigger.

1. **Claim**: "More businesses expect their activity to increase in the next 12 months than don't"
   Percentages from Survey: 41% expect their activity to increase, 32% expect to decrease
   Sample Size: 300
   Margin of Error: $2 \times \frac{1}{\sqrt{n}} = 2 \times \frac{1}{\sqrt{\quad}} =$ _____ (3sf) = _____%
   Construct the confidence interval: _____% ± _____% = (_____%, _____%)
   Interpret what this Means: We can say, with 95% confidence, the percentage of businesses which expect their activity to increase is somewhere between _____ percentage points _____ and _____ percentage points _____ than the percentage of businesses which expect their activity to decrease.
   Make a Judgement: This confidence interval _____ support the claim that a higher percentage of businesses expect their activity to increase than those that expect their activity to decrease because _____.

2. **Claim**: "More people support national than labour"
   Percentages from Survey: 37% plan to vote labour, 44% plan to vote national
   Sample Size: 1000
   Margin of Error: $2 \times \frac{1}{\sqrt{n}} = 2 \times \frac{1}{\sqrt{\quad}} =$ _____ (3sf) = _____%
   Construct the confidence interval: _____% ± _____% = (_____%, _____%)
   Interpret what this Means: We can be fairly sure the percentage of _____ _____ is somewhere between _____ percentage points _____ and _____ percentage points _____ than the percentage of _____.
   Make a Judgement: This confidence interval _____ support the claim that a higher percentage of _____ than _____ because _____.

3. **Claim**: "More people prefer Sean Connery as James Bond than Daniel Craig"
   Percentages from Survey: 35% like Daniel Craig, 43% like Sean Connery.
   Sample Size: 2,205
   Margin of Error: $2 \times \frac{1}{\sqrt{n}} = 2 \times \frac{1}{\sqrt{\quad}} =$ _____ (3sf) = _____%
   Construct the confidence interval: _____% ± _____% = (_____%, _____%)
   Interpret what this Means: It is a fairly safe bet the percentage of _____ _____ is somewhere between _____ percentage points _____ and _____ percentage points _____ than the percentage of _____.
   Make a Judgement: This confidence interval _____ support the claim that _____ _____ than _____ because _____.

4. **Claim**: "People prefer Prisoner of Azkaban to Deathly Hallows when looking at Harry Potter films"
   Percentages from Survey: 35% like Deathly Hallows, 39% Prisoner of Azkaban.
   Sample Size: 2,881
   Margin of Error: $2 \times \frac{1}{\sqrt{n}} = 2 \times \frac{1}{\sqrt{\quad}} =$ _____ (3sf) = _____%
   Construct the confidence interval: _____% ± _____% = (_____%, _____%)
   Interpret what this Means: _____ _____.
   Make a Judgement: _____ _____.