## Practice Final

Surfaces and Knots, Dave Bayer, May 13, 2002

Name: $\qquad$ School: $\qquad$

| $[\mathbf{1}]$ | $[2]$ | $[3]$ | $[4]$ | $[5]$ | TOTAL |
| :--- | :--- | :--- | :--- | :--- | :--- |
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You may use scratch paper, but only this sheet will be graded; please present all answers on this sheet.

In addition to this final, you may optionally retake midterm 2 . If you retake midterm 2, your score for midterm 2 will be the average of your scores on both tries, even if your score goes down. Do not retake midterm 2 unless you accept this risk.
[1] Which of the following knots are 3-colorable? Show the 3-coloring(s).

[2] Which of the following knots are 3-colorable? Show the 3-coloring(s).

[3] Computing the linking number between the components of each of the following links.

[4] Computing the linking number between the components of each of the following links.

[5] Classify the spanning surface shown for each of the following knots.


