Foundational Skills Review: Fractions

Because this material is Foundational Skills review, it will not be covered in class. It is expected that you will get help outside of class if you need it. You should check your answers with the answer key posted on your instructor’s website to make sure your work is correct.

You can get help with this work from the following sources:

1. Visit your instructor during office hours
2. Go to the Algebra Alcove
3. Use the following resources on the Internet:

   For Equivalent Fractions
   • YouTube video: [http://www.youtube.com/watch?v=U2ovEuEUxXQ](http://www.youtube.com/watch?v=U2ovEuEUxXQ)
   • Website: [http://www.mathsisfun.com/equivalent_fractions.html](http://www.mathsisfun.com/equivalent_fractions.html)

   For Converting Fractions and Decimals
   • YouTube video: [http://www.5min.com/Video/Learn-about-Converting-fractions-to-decimals-99165862](http://www.5min.com/Video/Learn-about-Converting-fractions-to-decimals-99165862)
   • Website: [http://cstl.syr.edu/FIPSE/Decunit/convert/Convert.htm](http://cstl.syr.edu/FIPSE/Decunit/convert/Convert.htm)

   For Converting Mixed Numbers and Improper Fractions
   • YouTube video: [http://www.youtube.com/watch?v=1xuf6ZKF1_I](http://www.youtube.com/watch?v=1xuf6ZKF1_I)
   • Website: [http://www.mathsisfun.com/improper-fractions.html](http://www.mathsisfun.com/improper-fractions.html)

Do not use a calculator to complete this assignment. You will not be allowed a calculator on this portion of Exam 1.

1. Write three fractions equivalent to \( \frac{3}{5} \).

2. Reduce \( \frac{20}{8} \) to lowest terms.

3. Fill in the blanks to make the statements true.
   \[
   \frac{5}{7} = \frac{56}{?} \quad \frac{3}{?} = \frac{18}{24}
   \]

4. Convert the following fractions to decimals. Round to the nearest thousandth if necessary.
   \[
   \frac{4}{5} = \frac{8}{7} = \frac{3}{5}
   \]

5. Convert the following decimals to fractions in lowest terms:
   \[
   0.24 = \frac{?}{?} \quad 0.70 = \frac{?}{?}
   \]

6. Convert the following mixed numbers to improper fractions:
   \[
   2 \frac{2}{3} = 1 \frac{7}{8} = \frac{15}{4}
   \]

7. Convert the following improper fractions to mixed numbers:
   \[
   \frac{7}{3} = \frac{15}{4}
   \]

Use *mental estimation* (no calculator or paper-and-pencil calculations) to fill in the blank with the appropriate symbol, >, <, =. Then explain your estimation strategy.

8. \( \frac{15}{6} \underline{\quad} \frac{18}{9} \)

  Explanation:
9. \( \frac{3}{7} \quad \frac{2}{3} \)

Explanation:

10. \( \frac{5}{4} \quad \frac{9}{8} \)

Explanation:

Internet resources for adding and subtracting fractions:
- Websites:
  - For addition: http://www.mathsisfun.com/fractions_addition.html
  - For subtraction: http://www.mathisfun.com/fractions_subtraction.html

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<tbody>
<tr>
<td>11. ( \frac{3}{8} + \frac{4}{8} )</td>
<td>12. ( \frac{2}{3} + \frac{5}{3} )</td>
</tr>
<tr>
<td>13. ( \frac{8}{9} - \frac{2}{9} )</td>
<td>14. ( \frac{2}{6} - \frac{5}{6} )</td>
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<tr>
<td>15. ( \frac{3}{8} + \frac{1}{4} )</td>
<td>16. ( \frac{5}{3} + \frac{2}{9} )</td>
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Answer the following questions based on information from your syllabus.

17. What are your instructor’s office hours?

18. How many absences are you allowed in this course?

19. When is your first test?

20. When is your final?