Appendix

Fraction Knowledge Test

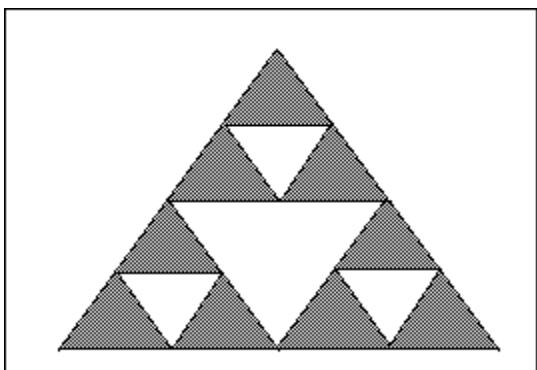Name:_____ Course: _____ Sections: _____ Date: _____

1. This is the unit.

What fraction represents two of these pieces?

2. Explain how you determined your answer for problem 1.

3. What fraction is represented by the shaded portion of the following figure?

4. Explain how you determined your answer for problem 3.

5. Give two fractions what represent the figure levels below.

6. Explain how you determined your answer for problem 5.

7. Determine whether the two fractions are equivalent.

$$\frac{243}{317} \text{ and } \frac{2673}{3487}$$

8. Explain how you determined your answer for problem 7.

9. Circle the larger fraction:

$$\frac{6}{14} \text{ and } \frac{5}{9}$$

10. Explain how you determined your answer for problem 9.

11. Find a fraction between the two given fractions.

$$\frac{3}{4} \text{ and } \frac{4}{5}$$

12. Explain how you determined your answer for problem 11.

13. How do you solve a problem like $\frac{1}{4} + \frac{2}{3} =$

14. Imagine that you are teaching addition with fractions. To make this meaningful for kids, what would you say would be a good story or model for $\dfrac{1}{4}+\dfrac{2}{3}=$

15. How do you solve a problem like $1\dfrac{2}{3}+\dfrac{3}{4}=$

16. Imagine that you are teaching addition with fractions. To make this meaningful for kids, what would you say would be a good story or model for $1\dfrac{2}{3}+\dfrac{3}{4}=$

17. How do you solve a problem like $\dfrac{3}{4}-\dfrac{2}{3}=$

18. Imagine that you are teaching subtraction with fractions. To make this meaningful for kids, what would you say would be a good story or model for $\dfrac{3}{4}-\dfrac{2}{3}=$

19. How do you solve a problem like $4\dfrac{3}{8}-3\dfrac{3}{4}=$

20. Imagine that you are teaching subtraction with fractions. To make this meaningful for kids, what would you say would be a good story or model for $4\dfrac{3}{8}-3\dfrac{3}{4}=$

21. How do you solve a problem like $\dfrac{3}{4}\times\dfrac{2}{3}=?$

22. Imagine that you are teaching multiplication with fractions. To make this meaningful for kids, what would you say would be a good story or model for $\dfrac{3}{4}\times\dfrac{2}{3}=?$

23. How do you solve a problem like $1\dfrac{1}{4}\times2\dfrac{2}{3}=$

24. Imagine that you are teaching multiplication with fractions. To make this meaningful for kids, what would you say would be a good story or model for $1\dfrac{1}{4}\times2\dfrac{2}{3}=$

25. How do you solve a problem like $\dfrac{1}{4}\div\dfrac{1}{3}=$

26. Imagine that you are teaching division with fractions. To make this meaningful for kids, what would you say would be a good story or model for $\dfrac{1}{4}\div\dfrac{1}{3}=$

27. How do you solve a problem like $2\dfrac{3}{4} \div \dfrac{2}{3} =$
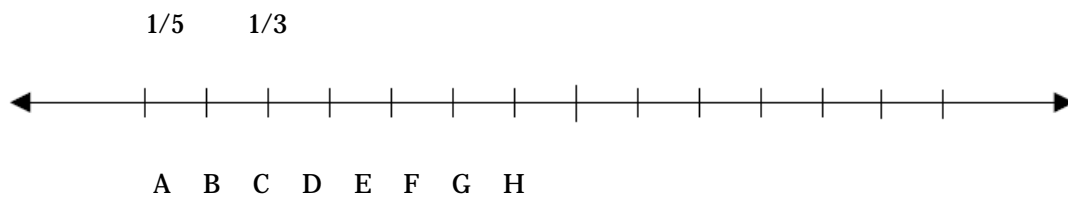
28. Imagine that you are teaching division with fractions. To make this meaningful for kids, what would you say would be a good story or model for $2\dfrac{3}{4} \div \dfrac{2}{3} =$

29. What number should go at the point marked by x?
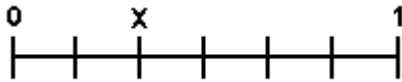
30. Explain how you determined your answer for problem 29.

31. The points A, B, C, D,E, F, G, and H are equally spaced along the number line.

What number corresponds to point G?

32. Explain how you determined your answer for problem 31.