FRACTIONS EXAM GRADE 7

Name: _____

You will have 60 minutes to complete this exam. The test is out of 70 marks.

Assessment Areas:

There are five sub modules to this course

- Simplifying and Converting Fractions
- Arranging Fractions and Adding Fractions
- Subtracting, Multiplying and Dividing Fractions
- Comparing Quantities
- Converting fractions to percentages

1. Simplify the following fractions if possible

a) $\dfrac{640}{80}$ (2)

b) $\dfrac{4}{64}$ (1)

c) $\dfrac{10}{18}$ (1)

d) $\dfrac{14}{98}$ (2)

e) $\dfrac{66}{3}$ (1)

2. Arrange in order of largest to smallest

$$\dfrac{6}{9} \qquad \dfrac{16}{32} \qquad \dfrac{24}{12} \qquad \dfrac{5}{7} \qquad \dfrac{3}{5}$$ (3)

3. Convert these improper fractions to mixed fractions

a) $\dfrac{16}{4}$ (1)

b) $\dfrac{126}{11}$ (2)

c) $\dfrac{14}{5}$ (1)

d) $\dfrac{49}{12}$ (1)

4. Convert these mixed fractions to improper fractions

a) $2\dfrac{2}{4}$ (1)

b) $3\dfrac{12}{11}$ (1)

c) $6\dfrac{2}{5}$ (1)

d) $7\dfrac{2}{4}$ (2)

5. Circle the larger fraction

a) $2\dfrac{1}{3}$ or $2\dfrac{3}{6}$ (2)

b) Five sixteenths or seven twelfths (2)

c) Seven eights or nine elevenths (3)

6. Add the following fractions together

a) $\dfrac{2}{4} + \dfrac{6}{3}$ (2)

b) $\dfrac{4}{6} + \dfrac{5}{3}$ (1)

c) $\dfrac{10}{12} + \dfrac{4}{24}$ (3)

d) $\dfrac{4}{8} + \dfrac{1}{3}$ (1)

e) $\dfrac{5}{2} + \dfrac{4}{12}$ (2)

7. Subtract the following fractions from each other

a) $\dfrac{2}{4} - \dfrac{1}{3}$ (2)

b) $\dfrac{4}{6} - \dfrac{2}{3}$ (1)

c) $\dfrac{10}{12} - \dfrac{1}{8}$ (3)

d) $\dfrac{4}{8} - \dfrac{1}{4}$ (1)

8. Multiply the following fractions from each other

a) $\dfrac{1}{4} * \dfrac{1}{6}$ (2)

b) $\dfrac{4}{6} * \dfrac{2}{3}$ (1)

c) $\dfrac{10}{12} * \dfrac{1}{8}$ (3)

d) $\dfrac{2}{3} * \dfrac{1}{4}$ (1)

e) $\dfrac{5}{9} * \dfrac{2}{3} * \dfrac{2}{1}$ (3)

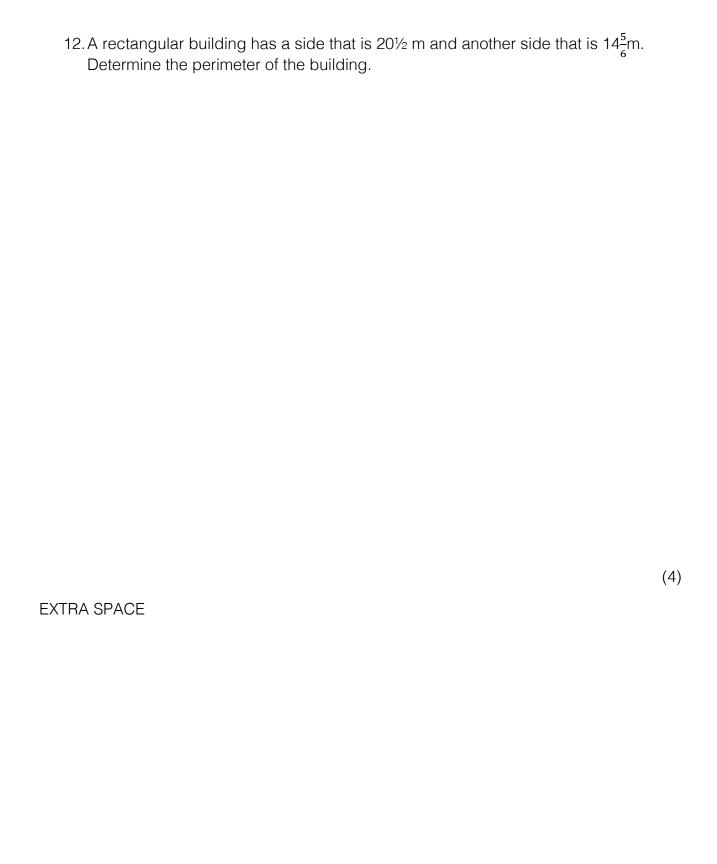9. Solve the following

a) $\dfrac{1}{4} \div \dfrac{1}{2}$ (2)

b) $\dfrac{4}{8} \div \dfrac{2}{4}$ (2)

c) $\dfrac{10}{12} \div \dfrac{1}{8}$ (3)

10. Bill offers Sarah 2/5 of a 250g chocolate block, whereas Peter offers Sarah 2/3 of a 180g block of chocolate. Which block should Sarah have in order to consume the most chocolate?

(3)

11. Robert is charged $144 per water tank from "Super Water". If he consumes just 2/12 of that amount, what will he be charged? What percentage of the water tank will he consume assuming that $144 provides a full tank?

(3)

12. A rectangular building has a side that is 20½ m and another side that is $14\frac{5}{6}$ m. Determine the perimeter of the building.

(4)

EXTRA SPACE

END OF EXAM

Mathematical Knowledge and Understanding
How well a student answers a question and applies mathematical skills
A – exceptional, B – high standard, C – satisfactory, D – developing, E – poor

Mathematical Communication
How well a student shows lines of reasoning and demonstrates an understanding of algorithms, formulae and procedure
A – exceptional, B – high standard, C – satisfactory, D – developing, E – poor