**Grade 8 Benchmark Sample Questions**

**N1**

Which of the following numbers is a perfect square?

 A) 11 B) 24 C) 121 D) 150

**N1**

Which of the following numbers is a perfect square?

 A) 24 B) 99 C) 141 D) 169

**N1**

Which of the following numbers is a perfect square?

 A) 40 B) 44 C) 60 D) 64

**N1**

A square field has an area of 400*m2*. What is the perimeter of the field?

 A) 100*m* B) 80*m* C) 20*m* D) 4*m*

**N1**

 Which of the following numbers is **not** a perfect square?

1. 1 B) 2 C) 4 D) 9

**N1**

What is the area of a square whose perimeter is 16*cm*?

 A) 16*cm2* B) 32*cm2*C) 64*cm2* D) 256*cm2*

**N1**

Evaluate $\sqrt{36} $+$\sqrt{64}$.

1. 6 B) 8 C) 10 D) 14

**N1**

A square field has an area of 400*m2*. What is the length of one side of the field?

 A) 20*m* B) 80*m* C) 100*m* D) 200*m*

**N2**

What is the best estimate of $\sqrt{140}$?

1. 10 B) 11 C) 12 D) 13

**N2**

Which whole number would have a square root of approximately 7.5?

1. 15 B) 49 C) 56 D) 64

**N2**

Between which two consecutive whole numbers is $\sqrt{20}$?

1. 3 and 4 B) 4 and 5 C) 9 and 10 D) 19 and 21

**N2**

Which of the following square roots is closest to 6?

1.  B)  C)  D) 

**N2**

The prime factorization for a number is 2 x 2 x 7 x 7. What is the square root for this number?

1. 4 B) 14 C) 49 D) 196

**N2**

Which whole number would have a square root of approximately 4.5?

1. 2 B) 9 C) 18 D) 20

**N6**

Which of the following has the greatest quotient?

A)  B)  C)  D) 

**N6**

Estimate. Which of the following has the smallest product?

 A)  B)  C)  D) $\frac{8}{3}$ x $\frac{5}{2}$

**N6**

Calculate $\frac{4}{5} x 1\frac{1}{2}$.

1. 1$\frac{4}{10}$ B) 1  C)$ \frac{2}{5}$ D) 1$\frac{5}{7}$

**N6**

Eric takes 4minutes to walk around the track. If he continues to walk at the same speed, how many times can Eric walk around the track in 36 minutes?

1. 6 B) 7 C) 8 D) 9

**N6**

Which of the following expressions does the diagram represent?



 A) $\frac{2}{12}$ of $\frac{2}{3}$ B) $\frac{1}{4}$ of $\frac{3}{4}$ C) $\frac{1}{4}$ of $\frac{2}{3}$ D) $\frac{2}{12}$ of $\frac{1}{4}$

**N6**

Marie has *m* of string. She needs*m* of string to create one bracelet. How many

bracelets can Marie create?

 A) 2 bracelets B) 3 bracelets C) 4 bracelets D) 5 bracelets

**N6**

Choose the number that is the best estimate for $8\frac{4}{5 } $ $÷$ $2\frac{2}{3}$

 A) 3 B) 6 C) 16 D) 18

**N6**

Calculate: 3 $\frac{1}{5}$ x $\frac{1}{2}$

 A) 1$\frac{3}{5}$ B) 3$\frac{1}{10}$ C) 4$\frac{1}{2}$ D) 6$\frac{2}{5}$

**N6**

There are 3$\frac{1}{3} $containers of milk in Ryan’s fridge. How many glasses of milk can he pour

if each glass holds  of a container?

1. 20 B) 3$\frac{2}{9}$ C) 18 D) 3$\frac{1}{18}$

**N6**

What is the total area of a rectangle with $2\frac{1}{2} by 1\frac{1}{3}$ as its dimensions?

1. $2\frac{1}{6}m^{2}$ B) $2\frac{1}{3}m^{2}$ C) $3\frac{1}{3}m^{2}$ D) $3\frac{1}{6}m^{2}$

**N6**

Find the missing value to make the following sentence true: $\frac{1}{2} ÷$\_\_\_\_= 4

1. $\frac{1}{4}$ B) $\frac{1}{8}$ C) 4 D) 8

**N6**

Alisha needed $\frac{2}{3} L$ of gasoline to mow the lawn. There was $5\frac{1}{3} L$ of gasoline in the lawn mower. How many times can she mow the lawn before refilling the mower?

1. 4 B) 6 C) 8 D) 10

**N6**

How many $\frac{1}{4} L$ are in$ 6\frac{1}{2} L $?

1. $\frac{13}{2}$ B) $1\frac{5}{8}$ C) $2$4 D) $26$

**N7**

Chris has to answer the following skill-testing question to win two tickets to a Sea Dogs

game. What is the correct answer?

 $\frac{4\left(-3\right)+7(-4)}{5(-1)}$

1. -8 B) -5 C) 5 D) 8

**N7**

Evaluate: $\frac{-63}{7}$

 A) 9 B) 8 C) -8 D) -9

**N7**

Evaluate: (-5) x (-15)

1. -75 B) -105 C) 105 D) 75

**N7**

3. Evaluate: -3 x 15

 A) -45 B) -12 C) 12 D) 45

**N7**

Which expression has a product between -12 and -20?

 A) - 3 x (-4) B) - 4 x (- 5) C) - 4 x (- 4) D) 3 x (- 5)

**N7**

Solve: - 6 x (- 4) – (- 35) ÷ (- 7)

 A) - 1.6 B) 8.4 C) 19 D) - 29

**N7**

Evaluate: $\frac{-84}{7}$

1. -14 B) -12 C) 12 D) 14

**N7**

Colin has to answer the following skill-testing question to win two tickets to a Rip Tide

game. What is the correct answer?

-5 x (2 + 7) – 12 ÷ (-3)

 A) -49 B) -41 C) 41 D) 49

**N7**

Which expression has a product between -18 and -25?

 A) 3 x 7 B) - 4 x (- 5) C) 4 x (- 4) D) 3 x (- 7)

**N7**

Solve: -7 x (-3) – (-42) ÷ (-7)

 A) 15 B) 3 C) -3 D) -15